1-800-831-4242 | www.Jameco.com

ELECTRONIC KITS & PROJECTS

The most electronic kits in one place

FREE SHIPPING
*Details on page 1

JAMECO® ELECTRONICS

- Kitted to Build
- Project Variety
- More Kits at www.Jameco.com/KitMall

HOT NEW PRODUCTS

MakerBot® Replicator® Desktop 3D Printers

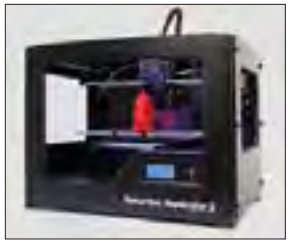
Visit www.Jameco.com/3DZone for all 3D printers and products

Get the easiest, fastest and most affordable tool for making professional quality models from the most trusted name in the 3D printing arena. The 4th and 5th generation 3D printers raise the bar for resolution, build volume, speed, ease of use, and affordability. Print from over 200,000 3D objects from the online repository, Thingiverse.

Replicator Mini

- 5th generation compact 3D printer
- Build volume: 3.9"L x 3.9"W x 4.9"H
- Min. layer height: 200 micron
- Use 1.75mm PLA filament
- Size: 11.6"L x 12.2"W x 15"H

Part No.	Mfr. Part No.	Price
2214387	MP05925	$1,375.00



Replicator 2

- 4th generation desktop 3D printer
- Build volume: 11.2"L x 6.0"W x 6.1"H
- Min. layer height: 100 micron
- Use 1.75mm PLA filament
- Size: 19.1"L x 12.8"W x 14.7"H

Part No.	Mfr. Part No.	Price
2214408	MP04948	$1,999.00

★Web Code: TDP

Digitizer Desktop 3D Scanner

- Turn things into 3D models
- Scan volume: 8"L x 8"H
- Resolution:0.5mm
- Scan speed: 12 min. (appoximately)
- Size: 18.7"L x 16.2"W x 8.0"H

Part No.	Mfr. Part No.	Price
2214432	MP03955	$799.00

2214467

2214475

PLA Filament – 1.75mm

- Small spool (0.5 lbs.)
- Melt temperature: 150-160˚C

Part No.	Color	Price
2214441	Black	$18.00
2214459	White	18.00
2214467	Blue	18.00
2214475	Red	18.00

Adafruit Displays, Arduino and LED Products

Visit www.Jameco.com/ArduinoZone for all Arduino products

★Web Code: ARD

New interactive Arduino shields and LED backlight products give you exciting ways to enhance your projects.

Part No.	Mfr. Part No.	Description	Price
2211961	1602	8-pad capacitive touch sensor breakout - supports I²C & SPI	$9.95
2211995	1411	16-channel, 12-bit PWM/servo shield with I²C interface & built-in clock	17.95
2211987	1788	"Music Maker" MP3 Shield kit with 3W stereo amp. (speaker/SD card not included)	34.95
2211979	789	PN532 NFC/RFID controller shield for Arduino. Includes MIFARE® Classic 1K card	39.95
2212007	170	Adafruit ARDX v1.3 Experimentation kit for Arduino Uno R3. Explore 13 circuits. 75+ pcs.	89.95
2211952	326	Monochrome 0.96" 128x64 px OLED graphic display (SSD1306), SPI/I²C, 3/5V, PCB: 1.5" x 1"	19.95
2215232	1947	2.8" TFT color touch shield with capacitive touch & µSD slot, 240x320 px, 18-bit color, I²C	49.95
2214344	1376	5V 39" NeoPixel RGB LED strip, IP65, 30 digitally-addressable LEDs, WS2812B, white PCB	17.95
2212015	1138	5V 39" NeoPixel RGB LED strip, IP65, 60 digitally-addressable LEDs, WS2812B, white PCB	24.95
2214379	1626	White LED backlight module, 0.5" x 1.6", 150 mcd, 3V @ 20mA, 1/8" thick	2.49
2214352	1622	White LED backlight module, 0.9" x 3.0", 110 mcd, 3V @ 20mA, 1/8" thick	2.95
2214361	1621	White LED backlight module, 1.8" x 3.4", 80 mcd, 3V @ 20mA, 1/8" thick	3.49

2211961

2211987

2212015

2214352

Arduino-Compatible Sensors

★Web Code: AOS

Whether switching, reading, measuring or sensing, give your next project more ways to interact with the world around it.

Part No.	Description	Price
2206096	Ambient light sensor, 20k-1MΩ, 3-5V, LM358, -30˚C to +70˚C	$4.95
2206109	Relay module, NO, 250VAC/30VDC max. @ 10A, 1.65" x 0.9" x 0.8"	7.95
2206117	Ambient temperature, -40 to125°C, ±1.5°C, 3-5V, 10kΩ zero power	5.95
2206125	Analog sound sensor, 20Hz-16kHz, 4-12Vdd, 54dB S/N	6.95
2206133	Analog moisture sensor, 3-5V, 35mA, 0.8"x2.4"	5.95
2206141	3-axis digital accelerometer, ±1.5g, 5VDC, I²C, 21 LSB/g	14.95
2206150	PIR motion sensor, 120°, 0.1-19.5', 3-5VDC, 1-25 sec. hold time	9.95
2206168	Ultrasonic distance finder, 42kHz, 0.2-19.5', 3.3/5V, PWM output	14.95

2206096

2206109

2206117

2206125

2206133

2206141

2206150

2206168

Rapid Development & Prototyping

★Web Code: ARD

Honey, they shrunk the Arduino… and made it wireless! RFduino is an Arduino-compatible, high-performance configurable wireless RF module that allows for fast development and prototyping of projects for the Internet of Things! The powerful RFduino features ARM Cortex M0, 256kB Flash, 2.4GHz transceiver and Bluetooth 4.0 Low Energy. Servo, relay, protoboard, RGB/Button, battery and other modules are available online.

2209772

2209781

2209908

Part No.	Mfr. Part No.	Description	Price
2209772	RFD22102	RFduino DIP, 16MHz, 3V, 18mA. Requires 2209781 to program, 4 dbm 2.4GHz Bluetooth LE	$22.95
2209781	RFD22121	USB Shield to program RFduino, USB type-A male, 500mA max. RX, TX, Reset interface	22.95
2209908	RFD90103	12 Piece Development Kit: USB shield, 2 RFduinos, 9 accy boards (servo, RGB pushbutton & more)	189.95

The Largest Selection of Kits in the Industry

There's nothing like the thrill of seeing an electronics project come to life.

Taking a collection of parts and turning them into a completed build is educational, but more importantly it's fun. Jameco has the largest collection of electronic kits available anywhere. Our unique kits span several electronics categories including audio, LEDs, robotics, games, clocks and more. These fun-for-all-ages kits are created by independent designers from around the world and some of the industry's most popular manufacturers including Velleman, OWI-Robot, Parallax and Adafruit.

Jameco's electronic kits range in skill level from beginner to advanced, so it's easy to find the right project. For electronics designers, Jameco encourages design submissions through ClubJameco.com. Through Club Jameco anyone can design a project and earn a commission on every sale.

All kits come with step-by-step instructions and whether you're a beginner or advanced hobbyist, we have a kit for you. Pick up a great electronic kit from Jameco today and we'll pick up the shipping.* Join the fun of one of the fastest growing hobbies in America.

*This offer is for one-time use, cannot be combined with any other offer and is limited to stocked product that can ship by December 19, 2014 within the continental United States. Orders must contain $45 in products listed in this URL www.Jameco.com/KitOffer to receive free ground shipping from a carrier of Jameco's choosing. You must say or enter your offer code from the back cover of this catalog when placing your order.

Electronic Kits Superstore

Jameco has amassed the largest collection of electronic kits under one roof. We have so many kits that they can't just fit into one store, so we've created the first Electronic Kits Mall packed with online stores you'll want to check out. Jameco's Electronic Kits Mall has stores for Arduino, Lighting, Beginner Kits and Sensors, allowing you to quickly find the projects you are most interested in. Easily browse hobby kits and supplies by interest. Visit www.Jameco.com/KitMall and see how easy and fun shopping can be. Look for Web references marked throughout the catalog for individual category stores to enhance your shopping experience.

Club Jameco

Club Jameco is an innovative community-based electronic kits design program where anyone can pitch a project idea or design an electronic kit. When a project is completed and approved, Jameco kits it, promotes it, sells it and pays a commission to the designer on every sale. The top Club Jameco designer earned more than $1,000 in commissions in the first quarter of 2014. Find out everything you need to know at ClubJameco.com. If you have an idea for a great kit but are not sure how to go about building it, you can post a comment on the Club Jameco Whiteboard to connect with other designers and Jameco community members.

Catalog Tools

Enter the Web Code in the product search box

*Club Jameco Kits — Web Code CJK

By simply entering a three character Web Code into the search box at the top of every page on Jameco.com, you'll find more electronic kits, more product information, and the latest pricing and availability information. Jump seamlessly from catalog to Web using Web Codes.

CATALOG QUICK INDEX

Hot New Products	Inside Front Cover, 13 & Back Cover
Robotic & Computer Controlled Kits	2
Test & Measurement Kits	2
Distance & Light Kits	3
Time & Clock Kits	3
Power Supply & Motor Kits	3
Audio Kits	4
Forrest M. Mims III Kits	4
Club Jameco Kits	5
Alternative Energy Kits	6
Solar Products & Accessories	7
Parallax Kits & Accessories	8 & 9
Arduino	10-12

Prices and discounts are subject to change without notice.

Jameco Electronics, ValuePro, ReliaPro, BenchPro and KitPro are trademarks of James Electronics, LTD. Other product names and logos are used for identification purposes only and are trademarks of their respective companies. ©2014 James Electronics. All rights reserved.

The Electronic Kits Zone is filled with fun and exciting projects for the hobbyist at heart! Here you'll find some unique projects not available anywhere else. There are multiple skill levels available to satisfy all electronics enthusiasts.

www.Jameco.com/ElectronicKitsZone

Evil Mad Scientist

The Original Deluxe Edition Egg-Bot Kit

The Eggbot is an open-source art robot that can draw on spherical or egg-shaped objects from roughly 1.25" to 4.25" in diameter. The EggBot is very adjustable and is designed to draw on all kinds of things that are normally "impossible" to print on such as Pin Pong balls, light bulbs or ornaments. The GUI works on Mac, Windows and Linux. The pen holder fits various art pens like Sharpie Ultra Fine Point pens.

- 16x microstepping driver with 200 step/revolution motors for 3200 step/rev. resolution on each axis.
- Experience level: intermediate

Part No.	Includes	Price
2157116	Precision egg coupler, 5/64" balldriver, brass hardware upgrades	$199.95

Tyrannosaurus 242923

RFID Proximity Card 2123936

Terrain Tracked Robot 2128331

Robotic Arm 2095023

Mr. General 2150580

3pi Robot 2136403

J-Bot v2.0 2157124

Electronics Discovery Kit 2119662

Playful Puppy 2190101

Electronic Decision Maker 2131207

Brain Game 2136999

Christmas Tree 2150694

Robotic and Computer Control Kits

Visit www.Jameco.com/ElectronicKitsZone for all electronic kits

★Web Code: ERK

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Weight (lbs.)	Price
242923	21-601	Mechanical Wooden Tyrannosaurus kit. Kid friendly pre-punched wooden parts with motors and gears.	116	○	1.5 x 3 x 6.5	0.9	$14.95
2111960	535-USB	USB Arm controller for P/N 2095023. Use your Windows PC for manual or programmed control of arm.	1	○	5.5 X 1.8 X 7.5	0.3	34.95
358272	70162	Design a robot with this RC Robot Construction set! Lift, scoop and drop all kinds of stuff.	144	○	6.5 x 3.5 x 3	1.0	46.95
2150619	RS014-USB	2-in-1 Mini Robots include infrared compound eye, 4 mini servos and universal remote. Tools included.	22	○	3 x 3 x 5	1.0	59.95
200328	MK127	Light-Following Running Micro Bug has adjustable sensitivity. LED eyes indicate driving direction.	26	▯	4.0 x 2.4	0.2	9.95
200336	MK129	Light-Seeking Crawling Micro Bug has adjustable sensitivity. LED eyes indicate driving direction.	29	▯	4.0 x 2.4	0.2	13.95
239476	K2633	Relay Card kit: 4 relay output. Requires 9VDC @ 300mA power supply P/N 133891 (see web).	29	▯	3.0 x 2.7	0.4	14.95
386708	21-880	Line Tracking Robot Mouse will endlessly follow a black line on white paper. (soldering required)	130	▯	3 x 3 x 3	0.9	22.95
386610	21-886	Terrain Escape Robot kit with infrared emitting diode and receiver module. (4 x AAA required)	86	▯	5 x 5 x 5	0.9	22.95
2130600	K8015	Multi-function Relay Switch with 14 different functions and pushbutton control. Max load: 5A (1100W/230V).	37	▯	3.4 x 1.5 x 1.0	0.5	23.95
2130491	K4305	20-LED Stereo VU Meter. -20dB to +3dB, 10-15VDC/0.25A input 2x10 LED dot indicator via solder pad.	45	▯	1.5 x 2.7 (x2)	0.5	29.95
2123936	MK-179	RFID Proximity Card Reader kit, include 2 tags EM4100 compatible. Relay activation, 5 sec-4 mins.	52	▯	2.6 x 2.4 x 0.8	0.5	32.95
2128374	21-531N	Titan Tank kit, infrared remote control, 4-ch selection for battle, 4xAA & 4xAAA batteries required.	121	▯	6.5 x 6.5 x 3.6	1.5	34.95
358352	75020	Line Tracing Snail Robot kit detects a black line on white paper with special LEDs. Clear shell.	40	▯	6.9"H	2.0	36.95
2128331	OWI-536	3-In-1 All Terrain Tracked Robot; transform to a forklift, rover or gripper; wired remote control.	120+	▯	—	2.2	45.95
2095023	OWI-535	Robotic Arm. 5 DoF, base rotates 270°. Lifts 100g. 12.6" reach. 4 D-cell batteries required.	87	▯	6.3 x 15 x 9	2.5	49.95
2150580	RS002	Mr. General mobile robot platform has compound IR eye, 2 servos for pan/tilt and 2 cont. rotation servos. MCU & batteries not included.	206	▯	7.5 x 4.8 x 4	1.5	59.95
2204373	88003RC	RC Eye One Quadcopter, 915MHz, self-stabilizing, robust 4-rotor frame and smart flight control system	11	▯	7.2"Dia.	0.18	59.95
2204381	88006RC	RC Eye One Quadcopter, 2.4GHz, landing gear upgrade, 25% more power in Sport mode, acrobatic flip ability	11	▯	7.2"Dia.	0.18	79.95
2136403	975	3pi Robot with 2 gear motors, 5 reflectance sensors, LCD, buzzer, connected to an ATmega328 microcontroller.	1	▯	3.7"Dia.	0.18	99.95
2140285	J-BOT	Build your own very own customizable robot with ultrasonic sensors, 4WD platform, breadboard, MotorShield kit and more.	22	▯	9.5 x 7 x 8	3.6	144.95
2157124	J-Bot v2	Build your customizable mobile robot w/ ultrasonic sensor, 4WD chassis, breadboard and Romeo microcontroller w/ built-in motor control.	17	▯	9.5 x 7 x 8	3.8	144.95
2157116	258	Egg-Bot Deluxe is an open-source robotic arm that can draw on spherical shapes like eggs, ping-pong balls, golf balls. and christmas ornaments up to 4.25" diameter. No soldering/programming required. PC/Mac required to create designs.	126	▯	11 x 7.5 x 6	2.8	199.95
2123952	K8090	8-ch. USB Relay Card. Up to 16A/relay, can use with iPhone application. (Assembly required)	124	◆	6.3 x 4.2 x 1.2	1.0	69.95
2190101	RS032	Playful Puppy Quadruped Robot w/ 10 servo motors. Arduino compatible. (7.4V @ 2.2Ah LiPo P/N 2167787, see Web)	85+	◆	7 x 4.5 x 5	1.3	149.95

Test and Measurement Kits

★Web Code: TMK

2136930	MK105	Signal Generator. 1KHz fixed freq. 0-100mVrms pot adj. 9V battery required. Sine, triangle, square wave.	30	○	2.2 x 1.6	0.1	$8.95
662725	EBLOG-300A	Logic Probe kit. 3V-16VDC, detect high, low, pulse signal. Easily monitor digital circuits.	14	○	4.0"L x 0.75"Dia.	0.1	10.95
2181343	M-2666K	Deluxe Digital Multimeter kit. 3½-digit display and AC/DC current up to 20A. (Capacitance, transistor, diode test)	135	○	7.5 x 3.5 x 1.3	1.8	41.95
2119662	SL004	Electronics Discovery kit. 16+ projects work with LEDs, switches, buttons, sensors, diodes, 556k IC and breadboard.	130	○	10 x 6.7 x 3	1.0	49.95
129091	K7102	Metal Detector kit. Sensitive within 8cm (9V battery required) LED proximity indicator, adjustable sensitivity.	22	▯	2.2 x 2.5	0.4	15.95
20685	JE2206	Function Generator kit. 1-100kHz in 4 ranges. Operates from +12 or ±6VDC @ 15mA. Sine, square and triangle.	21	▯	4.1 x 1.5	0.1	27.95

Visit the Mall of Electronic Kits – www.Jameco.com/KitMall

EXPERIENCE LEVEL ○ = Beginner ▯ = Intermediate ◆ = Expert

Distance and Light Kits

Visit www.Jameco.com/LightZone for all LED kits and products

★Web Code: DLK

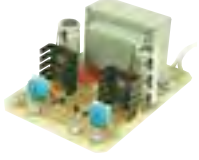
Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Weight (lbs.)	Price
2131207	MK135	Electronic Decision Maker: Rapidly flashes lights until it slowly stops at one. (9V battery required)	19	○	2.2 x 1.2 x 1.4	0.1	$6.95
147635	MK100	Flashing Christmas Tree: 16 LEDs consumes 4mA max. Easy to solder. (9V battery required)	30	○	4.0 x 2.4 x 1.0	0.1	7.95
2136999	MK112	Electronic Brain Game: Just like Simon Says. Features visible and audible modes. 4 skill levels. (3xAA batteries required)	28	○	2.0 x 2.6	0.2	9.95
2130933	MK147	Dual white LED stroboscope creates a powerful flash effect. Speed adjustable 1-60 flashes/sec. (9V battery required)	21	○	2.2 x 1.3 x 1.6	0.1	9.95
236081	MK145	Halloween Pumpkin: 25 yellow LEDs flash randomly to simulate a flickering candle.	71	○	2.48 x 2.24	0.2	13.95
2130802	MK150	Shaking Dice: Just give it a shake and the LEDs will automatically light a value, auto power-off. (CR2032 required)	23	○	3.0 x 1.8	0.2	13.95
157964	LED1007	Infrared Illuminator: 13.2VDC, 8' dia. @ 24'. 36 high power IR LEDs 940nm/20° viewing angle.	41	○	2" Dia.	0.1	13.95
2136534	091	Larson Scanner: Create the scanning LED effect from Battlestar Galactica or Night Rider.	22	○	5.0 x 1.5 x 1.0	0.1	13.95
2136542	080	Deluxe Menorah: (9) 10mm yellow LEDs, press button to light another candle. (Soldering required)	28	○	5.0 x 1.5 x 4.25	0.1	15.95
2123928	MK149	Love Tester: 10-LED "love level" indicator with wide sensitivity range. (9V battery required)	44	○	4.1 x 3.1 x 1.0	0.2	16.95
2128286	MK172	60 LED Sound Star: "VU-meter" flash to audio, adjustable sensitivity & built-in microphone. (9V battery required)	113	○	4.2 x 4.4 x 1.4	0.1	19.95
2137191	MK119	Game of Roulette: 37 LEDs, a spinning sound and "winner" tune for each color. Pushbutton operation.	66	○	3.6 X 1.3	0.2	19.95
177092	IR-10	Infrared Transmitter & Receiver: Transmit 40kHz modulated IR up to 6-8". (9V battery required)	26	○	1.0 x 0.8	0.1	22.95
211764	MK116	Santa Sleigh and Reindeer: 126 red green and yellow LEDs flash to make a moving visual. (9V battery required)	201	○	5.7 x 3.2	0.1	24.95
2128278	MK170	60 LED Star: 24 flashing patterns, 3 static, 15 blinking, 6 animations with fade. (Soldering and 9/12VDC required)	94	○	4.1 x 4.3 x 1.4	0.1	24.95
147555	MK101	Flashing LED Sweetheart: Flashes 25 T1 (3mm) red LEDs. (9V battery required)	46	▯	1.3 x 2.3 x 1.3	0.1	9.95
2150694	MK183	USB Surface Mount Christmas Tree: 7 bright SMD LEDs. USB male connector is trunk of tree.	27	▯	2.48 x 2.24	0.07	14.95
200310	MK124	Scrolling Message: 16 characters scroll over 35 LED display, set your own message. (9/12VDC required)	76	▯	3.5 x 2.6 x 1.8	0.2	19.95
147643	K4304	10-LED Mono VU Meter: Adjustable input and light bar display.	36	▯	2.7 x 1.4	0.3	23.95
236072	MK117	Deluxe Christmas Tree: 134 LEDs of which 18 simulate randomly blinking candles. (9/12VDC required)	208	▯	3.2 x 5.6	0.2	26.95
129120	K3502	Parking Radar: Adjustable 2"-59" 5° detection angle. 10-15VDC in @ 16mA required.	55	▯	4.9 x 1.9	0.5	42.95
2136551	800820	Meggy Jr. RGB: Develop a handheld pixel-scale video game. 8x8 RGB matrix, includes one pre-prog. game, reprogrammable	80	▯	6.0 x 1.5 x 3.5	0.9	74.95

Meggy Jr. RGB 2136551

LED Wristwatch 2184237

Bulb Dial Clock 2136569

LED Alarm Clock 2157087



Dual Adjust Power Supply 20626

Servo Driver 2184229

Time and Clock Kits

★Web Code: TCK

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Weight (lbs.)	Price
2170839	264	DS1307 Real Time Clock Breakout Board. Integrate time keeping to your project. Includes PCB, battery and header.	8	○	0.95 x 1.2 x 0.2	0.01	$9.95
2157079	MTRTC001	ChronoDot Real Time Clock module (DS3231SN) temperature compensated ±2 minutes per year.	4	○	1.2"Dia.	0.4	15.95
2187323	MK188	1 second to 60 hour pulse-pause timer. Relay: 16A max. Use 12-24VDC via terminals.	30	○	3.2 x 1.8 x 0.9	0.2	19.95
2130520	VM141	Start-Stop Timer kit with a wide timing range, easy time setting, LED animation during operation and on-board start-stop buttons.	40	○	2.8 x 1.8 x 0.8	0.2	29.95
2150601	TK001	LCD clock training: Displays messages and builds an alarm clock. Comes with all components including ATMega8A pre-prog. microcontroller.	24	○	7.3 x 4 x 1.5	1.2	69.95
2184237	TK1106	Timesquare DIY wristwatch with red 8x8 display matrix and silicone watch band. Hackable!	20	▯	1.5 x 1.5	0.2	29.95
2136569	950+966	Desk/mantle LED shadow clock with 12 red, 30 green, and 30 blue LEDs to mark hours, minutes, and seconds.	147	▯	8.8 x 2.3 x 4.5	1.1	79.95
2157087	280	Alpha Clock Five. Alphanumeric LED alarm clock with Chronodot RTC module. 2.3" tall digits. 12/24 hour modes.	103	▯	9.4 x 2.8 x 3.8	2.2	144.95

Power Supply and Motor Kits

★Web Code: PSM

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Weight (lbs.)	Price
2115750	34020	Breadboard Voltage Regulator: 6-18Vin, 5V @ .5A out, 2.1mm jack input. Output pins plug into Pwr/Gnd channels.	12	○	2.2 x 0.6	0.1	$7.95
2159349	DFR0123	DC-DC Boost Converter. Input: 3.7-34V, Output: 3.7-34V. 15W max., 3A max input current. 90% efficiency	1	○	1.3 x 1.4	0.1	7.95
181833	VM-1	DC Voltage Monitor Kit with 7 LED display monitors 12VDC in 1V, 1/2V or 1/4V steps.	46	○	2.7 x 1.3	0.2	9.95
2119751	C-8051	Adjustable Gear Motor Kit: 4k-14k RPM - Ratios include 9/15/25/45/125/255/625/1125:1.	22	○	4.3 x 4.9	0.2	11.95
2184229	815	16-channel 12-bit PWM/servo driver with I²C interface. PCA9685. 5V tolerant. Daisy-chain up to 62 modules.	7	○	2.5 x 1	0.1	16.95
117621	K1823	1.5A @ 1.5-35VDC Power Supply kit. Max input: 28VAC or 4VDVC. (Power supply not included)	12	▯	2.1 x 2.1	0.3	13.95
2137166	K8042	Symmetric 1A Power Supply Kit. Output of 1.2-18VDC depends on AC transformer (not included).	46	▯	3.1 x 2 x 0.9	0.5	16.95
20626	JE215	Dual Output Adjustable Regulated Linear Power Supply: ±5 to ±15VDC, 175mA to 750mA. LED on indicator.	48	▯	5.1 x 3.5 x 2.0	2.1	29.95
127829	GMC-1102	Motor Speed Control: Powers up to 5A @ 100VDC. Uses pulse width modulation to vary speed of DC motor.	35	▯	3.6 x 2.3 x 1.2	0.3	39.95
358248	70097	Twin Motor Gearbox: 58:1 & 203:1, 3mm hex shaft. RPM: 230,65. Torque: 269,941g-cm.	61	◆	3.0 x 4.0	0.3	11.95
120539	K8004	DC Pulse Width: Proportional DC to PWM 0-100%. Op. voltage: 8-35VDC. 6.5A max output current.	40	◆	3.3 x 1.9 x 1.8	0.5	23.95

★For additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

Electronic Kits

New Products Marked in Pink

Electronic Cricket 2136956

IR Light Barrier 2131012

Telegraph 285624

MP3 Playback Module 2135751

MP3 Player 2120823

Signal Generator 2136930

Visit www.Jameco.com/ElectronicKitsZone for all electronic kits

Audio Transmitters, Amplifier, Sound Generator and Detection Kits

★Web Code: AAK

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Weight (lbs.)	Price
2136956	MK104	Electronic Cricket: Activated by darkness; effect, tone and light sensitivity adjustable. (9V battery required).	25	○	2.2 x 1.6 x 1.0	0.11	$7.95
2131012	MK120	Infrared Light Barrier: 85dB audible alarm and visible LED alert. Just like a door chime when you enter a store.	46	○	2.2 x 1.6/3.9 x 2.0	0.18	9.95
2130984	MK136	Super Stereo Ear audio amplifier boosts sound up to 50 times louder. Requires 3AA batteries (not included).	35	○	2.4 x 2.1 x 1.7	0.15	9.95
2130731	MK171	Voice Changer kit: Add effects to your voice with robotic, vibrato, high-low effects and more. (9V battery required).	36	○	3.0 x 1.8	0.11	12.95
2130870	MK113	Siren Sound Generator. 4 different sounds with pitch adjustment potentiometer. (9V battery required).	17	○	2.4 x 1.6	0.1	12.95
2123944	MK-182	Digital Echo Chamber kit. Echo effect, line-in & out, output 8Ω, 500mW. 80-200ms delay. (9V battery required).	63	○	3.35 x 2.76 x 0.78	0.5	24.95
285624	RS-TGI	Build your own Telegraph. Send a SOS, learn to encode Morse messages. (6V lantern battery required P/N 2183699).	9	○	3.0 x 3.0 x 3.3	1.3	49.95
2135751	AP-MP3	MP3 playback module. MP3/PCM/WAV supports up to 32GB micro SD. Serial interface - microcontroller compatible.	1	○	2.5 x 2.0	0.2	99.95
147571	MK103	Voice Activated Kit: Requires 8-15VDC Power Supply or 9V battery, sound activates 4 flashing LEDs.	33	▯	2.5 x 1.6 x 1.4	0.1	6.95
662670	EBST-11	Audio Stereo Amplifier: 1 watt (9V required) Add a parabolic reflector and hear blocks away.	32	▯	2.8 x 2.3	0.2	9.95
117612	K1803	Universal Mono Pre-Amp: Output impedance: 1kΩ, adjustable output level: 40dB max. (10-30VDC power supply required).	17	▯	1.2 x 1.8	0.3	10.95
151204	AA-1	Super Snooper Big Ear Audio Amplifier: Magnify small signals and drive a small speaker or headphones. (9V required).	17	▯	1.8 x 1.0 x 0.6	0.1	10.95
127255	K4001	7-Watt Amplifier: Requires 15VDC @ 500mA power supply, music output power: 7 watts, 4Ω.	22	▯	2.2 x 1.4	0.3	15.95
211772	MK118	FM Radio: 88-108MHz (12VDC, 2.1mm required), on/off switch, volume control and LED indicator.	65	▯	4.8 x 3.3	0.3	24.95
151239	FMST-100	FM Stereo Transmitter Mini: Transmit your audio source wirelessly up to 150' to FM radio. (9V battery required).	37	▯	2.7 x 2.0	0.2	29.95
129138	K4003	30W Stereo Power Amp. (req. 1x 24VCT @ 2A power supplies). Max out: 2 x 15W/4Ω or 2 x 10W/8Ω. 0.07% THD.	38	▯	2.8 x 2.0	0.7	29.95
127562	K4401	Sound Generator: 10 unique sounds, like machine gun. Euro siren, "wild charge", "snake charmer". (9V required).	61	▯	2.8 x 2.8	0.4	29.95
2120815	K8098	Audio Analyzer, display EMS/peak power, mean/peak dB, audio spectrum on a 5" x 2.5" white backlit display.	73	◇	5 x 2.5 LCD	0.6	66.95
2120823	K8095	MP3 Player: Create your own jukebox, sound effects, MP3 and more! SD card operation. 12VDC/1A 2.1mm supply req. Hi-quality VLSi decoder, volume control, up to 32GB, up to 1024 folders with 16,348 songs each.	100	◇	5.11 x 3.9	0.7	74.95

Miscellaneous Kits

★Web Code: ERK

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Weight (lbs.)	Price
358310	70098	Universal plate set for P/N 358299 (below). 11 x 31 grid of 3mm holes spaced 5mm apart, includes shaft mounts.	25	○	2.4 x 6.3	0.1	$7.95
358299	70100	Tank Track and Wheel set. 3 track lengths. Sprocket wheels, idler wheels and road wheels included.	40	○	—	0.5	9.95
2119734	C-9701	20 second voice recorder, assembled, 1 msg. Needs 5VDC source. Output: 0.5 - 2W/8Ω speaker (not included).	1	○	1.4 x 0.9 x 0.5	0.1	12.95
2161617	SP-1A	Learn to Solder Flashing Siren kit. Same as P/N 2124218 (below), without 25W iron and wire cutters.	23	○	4.9 x 2.5	0.3	10.95
2124218	MKEL4	The Learn to Solder Flashing Siren kit teaches you the basics of soldering. Includes 25W iron, wire cutters and solder. 9V battery not included.	25	○	4.9 x 2.5	0.8	18.95
2124200	FO-30K	This kit teaches the fundamentals of fiber optics. You can transmit your voice or a 1kHz signal thru the 3 ft. fiber optic cable.	56	○	1.3 x 4 x 1	0.4	21.95
2168481	5060322 452104	Glowing Paper House Kit, with electric pen P/N 2168464 photoresistors, LEDs, transistors & batteries.	17	○	3.0 x 3.0 x 3.0	0.46	32.95
2143865	ROV5-1	Rover 5 Tracked Chassis. Height adjustable by 1.5" and has max speed of 10 in/sec. 87:1 gears.	5	○	9.5 x 9 x 3	2.2	49.95
2161609	MX909	500-in-1 Electronic Projects Lab kit. Includes manual manual & detailed instructions. 6xAA batteries not included.	200	○	16 x 24 x 4	11	259.95
2114520	70108	Tracked Vehicle Chassis kit. 2 gear ratios, 58/203:1. Motors: FA-130, 2xAA batteries required.	57	▯	2.8 x 2.4 x 1	0.6	19.95
2114546	70168	Double Gearbox, 4-speed, independent left/right. 1.5V-3V. Ratios: 12.7/38.2/114.7/344.2:1.	116	◇	2.8 x 2.4 x 0.9	0.3	12.95
2146572	VM110N	Control your electronics from your computer w/ this USB Interface, 7 inputs and 10 outputs.	1	◇	5.7 x 3 x 0.8	0.6	89.95

Forrest M. Mims III Kits and Books

See complete kit descriptions online, additional parts may be required

★Web Code: FMB

Part No.	Description	1	5
2155487	Atari Punk Console Kit: Sound synthesizer based on the 555 timer and potentiometers.	$24.95	$22.95
2155508	Toy Organ Kit: Each button generates a different tone with tunable volume and pitch.	44.95	39.95
2155495	The Fridge Alarm Kit with Forrest Mims Mini Notebook: Electronic Sensor Circuits & Projects.	29.95	24.95
2155532	The Vibration Sensor Kit: Detect vibrations with a piezo speaker and signals via an LED.	19.95	18.95
2158709	Forrest Mims Mini Notebook Series, Volumes 1-4.	52.95	51.95
2158047	Forrest Mims Five Book Bundle: Includes a collection of 100 hand-tested circuits for building.	69.95	66.95
2158725	Forrest Mims Five Book and Four Electronic Kit Bundle: Soldering is required.	169.95	164.95

2155487

2155508

2155532

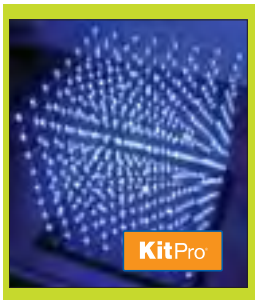
2155495

Visit the Mall of Electronic Kits – www.Jameco.com/KitMall

EXPERIENCE LEVEL ○ = Beginner ▯ = Intermediate ◇ = Expert

*The electronic kits for sale here are designed by members of the Club Jameco community. You'll find electronic kits you've never dreamed of. Design your own electronic kit, sell it on **ClubJameco.com** and earn a commission every time it sells. More information available at*

www.Jameco.com/DesignerZone



8x8x8 LED Cube PCB/Shield Kits

NEW MARKED IN PINK

Everyone will be mesmerized by its hypnotic effect as LEDs dance in brilliant patterns. An Arduino UNO programs and powers the cube. Kits include two custom PCBs to make building the kit much easier.

Part No.	Cross Ref. No.	Description	Exp. Level	Price
2210651	JE888-BLU	Blue LED cube	■	$149.95
2210642	JE888-GRN	Green LED cube	■	149.95
2210669	JE888-WHT	White LED cube	■	149.95

Visit www.Jameco.com/LightZone for all LED kits and products

JAMECO KitPro Club Jameco Projects

NEW MARKED IN PINK

Earn with Club Jameco
www.ClubJameco.com/Earn

See complete kit descriptions online (Additional components may be required)

Audio VU Meter 2182670

LED Strobe Light 2205991

Metronome 2168325

Geiger Counter 2170812

★Web Code: CJK

Waveform Generator 2189548

Pocket Power Supply 2204197

Visit www.Jameco.com/DesignerZone for all Club Jameco projects

Part No.	Description	Exp. Level	Price
2160817	Super Simple Low Power AM Radio: Learn basic RF concepts while building a tunable breadboard AM radio transmitter using a 555 timer.	●	$14.95
2158987	Cyclops Walkbot: A great beginner solder kit that builds a 1" square vibrating robot with an LED eye. Sure to entertain kids and cats alike!	●	15.95
2204197	Pocket Power Supply: Select a voltage output of 1.5, 3, 4.5 or 6V from a 9V battery source. Alligator clip leads for output.	●	17.95
2169580	Easy Laser Alarm: A good beginner kit using a 741 Op-Amp and 4017 decade counter as the brain. Break the beam and you'll set off the buzzer!	●	19.95
2205991	Portable LED Strobe Light: The flash rate of the 30 ultra bright white LEDs is adjustable with a potentiometer.	●	19.95
2184579	Arduino Temperature Sensor: Display on a 4-digit 7-segment display mounted right on top of a Pro Mini.	●	22.95
2169459	Learn to Solder and Program Temperature Logger: Learn basics of soldering and programming in BASIC.	●	24.95
2169504	Prank Box: You make the box, we provide the electronics. A sealed box entices passers to turn a key, setting off a buzzer. Turning it off is a secret!	●	24.95
2168325	Metronome Kit: Includes a small speaker, flashing LED, and the ability to switch between different time signature options.	●	29.95
2189548	Arduino Waveform Generator Shield: A function generator, perfect for testing and debugging circuits. Sine, triangle, pulse and saw from 1-50Hz.	●	34.95
2190080	Vein Finder: This fun DIY project uses bright red LEDs to shine against your skin and highlight your veins! Case and batteries included.	●	39.95
2192093	DIY Robotic Hand Shadow: Build a robotic hand with servos that mimic your finger movements. Arduino and hand/glove not included.	●	99.95
2203872	DIY Intro to Alarms: Breadboard kit that experiments with a laser break-beam sensor, magnetic proximity sensor and a force sensitive resistor.	●	99.95
2204365	Parts Bundle for Arduino Cookbook: Contains roughly 90% of the parts used for projects in the Cookbook (P/N 2168384). Cookbook not included.	●	349.95
2182670	Simple Audio VU Meter: Uses 3914 chips to display the dB of your music on a 20 LED bar graph display. 3.5mm audio input jack.	■	19.95
2169571	8-Pin Programmer Shield: Program ATtiny series chips using an Arduino as the programmer. Works with Arduino Uno or Duemilanove.	■	24.95
2169109	Water Level Control Kit: Use simple electrodes to sense high and low water marks to trigger a relay. Pump and adapter not included.	■	24.95
2171591	Animated LED Eyes: These eyes scan the room from side to side and shoot forward if anyone walks by. PIR motion sensor and PIC MCU required.	■	24.95
2170530	Programmable Light Chaser: 32 LEDs in a row run through 13 different animation patterns selectable by DIP switch.	■	24.95
2170812	Pocket Photodiode Geiger Counter: This kit uses a PIN photodiode as a sub for expensive Geiger-Mueller tubes. Detects alpha and beta particles.	■	32.95
2171516	Portable Retro Hi-Fi Speaker: Turn your old bookshelf speaker into a portable sound system for music on the go.	■	34.95
2182661	Tripple Power Supply with Digital Monitor: Turn an unregulated 9V transformer into three selectable regulated output voltages of 5V, 9V and 12V.	■	34.95
2169467	Magic Morse Code Trainer: Immediately students can learn to key correctly and focus on accuracy and rhythm when doing morse code.	■	39.95
2169475	Surveilance Camera Pan/Tilt Decoder: Do more with your security camera or DVR system. Provides 6 relay outputs with your current system.	■	44.95
2170492	Go-Anywhere LED Digital Message Board: Three LED matrix display panels, Ardweeny & PS/2 keyboard gets you a 768-pixel digital message board.	■	44.95
2183816	PWM Stepper Motor Driver: Control a stepper motor using this circuit and a servo PWM signal from an R/C controller, arduino, or microcontroller.	■	44.95
2171997	Medium Power Resistive Decade Load Box: Build your own 5 watt decade resistance box with 1% accuracy from 0.1 to 999.9Ω.	■	54.95
2168309	Fun Light Switch Box: This enclosure holds different lights and a variety of buttons and switches to control the lights. Behavior changes by the setting.	■	69.95
2188326	Arduino Breadbox: Easy to use kit to experiment with servos and analog inputs. Works with Arduino Uno or Raspberry Pi (not included).	■	69.95
2192886	Home Energy Monitor: Monitor AC voltage and current for an entire home. The data collected is then used to calculate usage.	■	79.95
2160681	DIY Transformer: Learn how to wind a step-up or step-down transformer coil from scratch.	◆	24.95
2163962	PropClock Bundle: Use a Parallax Propeller microcontroller to drive a POV (persistence of vision) effect to display time	◆	24.95
2170337	Free Charge Controller Development Kit: Use this open-source kit to collaborate with developers to improve the MPPT controller.	◆	24.95
2190178	PID Temperature Controller: Designed around the ATmega328P microcontroller utilizing the Arduino Duemilanove bootloader.	◆	39.95
2172623	Clock in a Bottle: This design uses a Russian Numatron nixie tube (not included) for each digit. Additional materials required.	◆	39.95
2168940	8x8x8 Blue LED Cube: Includes 550 3mm blue LEDs. Driven by included Arduino Uno. Programming required.	◆	149.95
2172017	8x8x8 Green LED Cube: Includes 550 3mm green LEDs. Driven by included Arduino Uno. Programming required.	◆	149.95
2169539	8x8x8 White LED Cube: Includes 550 3mm white LEDs. Driven by included Arduino Uno. Programming required.	◆	149.95

The Mall of Electronic Kits – www.Jameco.com/KitMall

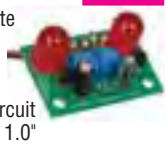
EXPERIENCE LEVEL ●= *Beginner* ■= *Intermediate* ◆= *Expert*

★*For additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box*

Dual Jumbo LED Flasher

NEW MARKED IN PINK

- Potentiometer adjustable flash rate
- 14 components; easy to solder
- Breadboard version (P/N 2217174)
- Simple transistor-based flasher circuit
- 9V battery not included • 1.5" x 1.0"



Part No.	Mfr. Part No.	Exp. Level	Price
2216606	JE250	○	$5.95

Arduino RFID Door Lock

NEW MARKED IN PINK

- Includes serial reader and tags, servo, ProMini, 6V power supply and case.
- Use included ProtoDough to make a custom bracket for your dead bolt

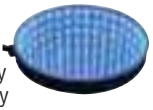
Part No.	Mfr. Part No.	Exp. Level	Price
2216841	JE260	▯	$119.95

Infinity Mirror Kits

NEW MARKED IN PINK

- Arduino-based breadboard circuit
- Uses a 39" 60 RGB LED strip
- Mirror and 2-way film not included

2215380: LEDs addressed collectively
2215398: LEDs addressed individually



Part No.	Description	Exp. Level	Price
2215380	Pot adj. for color & fade speed	○	$79.95
2215398	LED colors addressed in code	○	79.95

Alternative Energy Kits

NEW MARKED IN PINK

Visit www.Jameco.com/EnergyZone for all alternative energy kits

★Web Code: NRG

2112170

2112161

2206002

2095007

2206029

2153861
2163073
2163090

Part No.	Mfr. Part No.	Description	Price
2112170	FCJJ-16	Solar Hydrogen Education, invent clean energy applications using fuel cells and renewable hydrogen. Distilled water recommended.	$85.95
2112161	FCJJ-11	Fuel Cell Car Science, reversible PEM fuel cell combines electrolysis and power conversion in an autonomous car. Distilled water recommended.	83.95
2206002	FCJJ-34	Salt Water Fuel Cell science education kit. Electric motor with fan, wire leads with plugs and tubing included. Distilled water recommended.	79.95
2095007	FCJJ-23	H-Racer 2.0 is the world's smallest hydrogen fuel cell car equipped with remote-control steering and light emitting features with the car.	134.95
2112153	FCJJ-26	Hydro-Wind Turbine Kit invents clean energy applications using fuel cells and renewable hydrogen. Harness the energy of the wind.	99.95
2206029	FCJJ-42	Ethanol Fuel Cell science education kit. Extract hydrogen from ethanol to produce energy without combustion. pH paper, fuel cell, fan and tubing included.	159.95
2206011	FCJJ-35	Super Capacitor science kit. Store energy generated by the hand crank, measure stored voltage and run a small electric fan.	164.95
2163090	LWH22-10L-5	Hydrostik fuel cartridge, stores 15Wh of hydrogen energy in a solid-state, use with MiniPak power supply (P/N 2163073) & Hydrofill station (P/N 2153861).	24.95
2163073	FCHP-02	MiniPak power supply, delivers up to 2W DC power, includes Hydrostik cartridge (P/N 2163090), 0.5W LED flashlight and storage pouch. 3.8-5V out.	129.95
2153861	FCH-010	Hydrofill refueling station, fills the Hydrostik cartridge (P/N 2163090) with 99.9% hydrogen, produces three liters of hydrogen per hour, just add de-ionized or distilled water.	349.95

Part No.	Mfr. Part No.	Description	No. of Pieces	Exp. Level	Dimensions (L" x W" x H")	Weight (lbs.)	Price
2150424	DG-S001	Solar Man Walking Robot. Small parts, but a fun, easy-to-assemble kit for young builders.	18	○	1.8 x 2.2 x 3.5	0.2	$9.95
2112006	MSK670	Frightened Grasshopper Kit. Solar powered. Eyes jiggle, legs wiggle. Add light and watch it jitter around.	7	○	1.75 x 1.0 x 0.6	0.1	10.95
2112014	OWI-MISK671	Super solar racing car. No soldering. Uses 1.1V @ 50mA panel.	11	○	2.1 x 1.0 x 0.6	0.1	10.95
2128340	OWI-750	Salt Water Fuel Cell Car. Magnesium metal sheet (3 incl.), provides 5-7 hours of continuous play. Use distilled water.	20	○	3.0 x 1.6 x 0.7	0.5	12.95
2097521	MSK610	6-in-1 Educational Solar Kit. Create a solar car, airboat, windmill and more, no tools required.	33	○	4.75 x 2.4 x 3.4	0.5	17.95
2112090	MSK679	The Solar System Solar Kit. Build, paint and watch the solar system come to life using solar energy.	70	○	9.8"Dia. x 3.6"H	0.5	17.95
2111986	MSK614	T3 Transforming Solar Robot. Create a solar tank, scorpion or robot.	71	○	4.4 x 3.7 x 3.2	0.5	17.95
2144382	EDU02	Solar Energy Experiment Kit. Ten projects done on a high-quality breadboard. Includes microcontroller.	13+	○	3.15 x 2.36	0.5	27.95

DIY Workshop Kits

Circuit Skills Web Supported Kits & Projects

★Web Code: ERK

Part No.	Description	No. of Pieces	Exp. Level	Price
2121092	Build a basic guitar effect pedal while learning the basics for perfboard prototyping.	25	○	$24.95
2124197	SMT project with 1,206 components. You too can build a light reactive tone generator.	94	▯	29.95
2126272	Learn the basic functionality of an LED Color Organ ("sound-to-light") circuit.	212	▯	39.95
2127970	Learn how to drive an 8x8 LED matrix using an LED driver IC and an Arduino.	9	▯	59.95
2117202	Build a waveform generator and learn the basics for laying out an enclosure.	44	▯	64.95
2113244	Etch your own printed circuit board. Includes (2) 3"x4" pre-coated boards & etch solution.*	4	◇	46.95

*Shipped via ground to continental U.S. only

2117202

2124197

2126272

2127970

Jameco Builds

★Web Code: ERK

Part No.	Description	No. of Pieces	Exp. Level	Price
2192296	Construct a simple DC motor by making use of electromagnetic principles.	6	○	$13.95
2155567	RGB LED Origami (3) 10mm RGB LEDs, mini-breadbrd, hook-up wire, battery box & batteries.	11	○	17.95
2155541	LED Color Organ: Similar to P/N 2126272 but includes PCB with labels. Mono channel.	35	○	44.95
2192309	Construct a simple DC motor. Classroom pack for 20 students.	6	○	99.95
2155516	Build a compact USB charger w/ 5V output to charge small electronic devices.	37	▯	14.95
2146329	4x4x4 LED Cube: Requires AVR programming for blue LED display visuals.	100	▯	69.95

2155541

2192296

EXPERIENCE LEVEL ○ = Beginner ▯ = Intermediate ◇ = Expert

Learn how solar energy, hydrogen fuel cells and wind power work with one of these fun alternative energy kits, experiments and other projects.

www.Jameco.com/EnergyZone

Horizon

Renewable Energy Science Education Lab

Teach green energy technologies and help students develop their environmental awareness with applied STEP activities.

- Experiment with wind, solar and H_2O/Hydrogen electrolysis
- Evaluate the performance and impact of different technologies
- View data on PC Data Acquisition software
- Renewable energy curriculum included
- Experience level: beginner

NEW MARKED IN PINK

★Web Code: NRG

Part No.	Description	Price
2184755	Modular experiment set demonstrates clean energy technology	$279.95

1.2V Solar Cell

- 1.2 volts @ 75 mA
- Operating temp.: -40˚ to 85˚F
- Contact resistance: 35 mΩ max.
- 5" stripped/tinned leads attached

Part No.	Mfr. Part No.	Size (L" x W")	1	5
2210079	FAD-1	1.18 x 0.71	$3.95	$3.55

NEW MARKED IN PINK

1-Watt Solar Panel

- 9VDC max output
- 11V open-circuit voltage
- 0.24A Isc short-circuit current
- Can be expanded for more voltage/current
- 1W max power output
- 0.11A Ipm max operating current
- Pre-soldered color-coded leads

Part No.	Mfr. Part No.	Size (L" x W" x H")	1	5
2115291	750-00031	5.3 x 5.3 x 0.1	$12.95	$10.95

★Solar Panels — Web Code: AEK

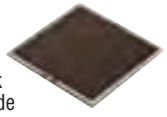
Monocrystal Sealed Solar Panel

- Equivalent to Panasonic BP-37334
- 12 cells
- Power: 98mW ±10%
- Rated voltage: 5.8V to 6.9V
- Rated current: 15mA
- Open circuit voltage: 7.2V
- Short circuit curr.: 17mA to 20mA
- 4 solder contacts on the back
- Size: 1.46"L x 1.28"W x 0.1" Thick

Part No.	Mfr. Part No.	1	5	25
2162572	RU6715	$7.95	$6.95	$5.95

60mm Solar Panel Mini

- Clear coat plastic
- Power output: 0.25W max.
- Volt. output: 4.7VDC to 5VDC
- Size: 2.36"L x 2.36"W x 0.1"Thick
- Material: copper indium diselenide



Part No.	Description	1	5	25
1928142	Solar panel	$7.95	$6.95	$6.25

PowerFilm Flexible Thin Film Solar Modules

Wireless Electronics Series The Wireless Electronics Series offers a new opportunity to solve the old problem of limited power for wireless electronics in portable and remote applications. These modules are lightweight, paper thin and durable.

228013

Part No.	Mfr. Part No.	Operating Voltage	Operating Current (mA)	Size (L x W x T) Inches	Size (L x W x T) mm	Pricing 1	Pricing 5	Pricing 25
227985	SP3-37	3.0	22	2.5 x 1.5 x .01	64 x 37 x 0.2	$3.95	$3.49	$3.15
227993	TX3-25	3.0	25	4.5 x 1.0 x .01	114 x 25 x 0.2	3.95	3.49	3.15
171061	MP3-37	3.0	50	4.5 x 1.5 x .01	114 x 37 x 0.2	5.95	5.35	4.79
228013	MPT3.6-75	3.6	50	2.9 x 3.0 x .01	74 x 75 x 0.2	7.95	6.95	5.95
228030	SP4.2-37	4.2	22	3.3 x 1.5 x .01	84 x 37 x 0.2	5.95	5.35	4.79
228056	MPT4.8-150	4.8	100	3.7 x 5.9 x .01	94 x 150 x 0.2	15.95	14.95	13.95
228064	MPT6-75	6.0	50	4.5 x 3.0 x .01	114 x 75 x 0.2	12.95	10.95	9.95
228072	MPT6-150	6.0	100	4.5 x 5.9 x .01	114 x 150 x 0.2	19.95	17.95	15.95
228099	MP7.2-150	7.2	200	10 x 5.9 x .02	253 x 150 x 0.6	37.95	34.95	32.95
228101	MPT15-75	15.4	50	10 x 3.0 x .02	253 x 75 x 0.6	19.95	17.95	15.95
228110	MPT15-150	15.4	100	10 x 5.9 x .02	253 x 150 x 0.6	39.95	35.95	31.95

WeatherPro Series

The right choice for permanent outdoor applications that are directly exposed to the elements. These modules feature rugged construction, a UV-stabilized surface, an extra edge seal for weather protection and tin-coated copper leads that extend from the module.

228161

Part No.	Mfr. Part No.	Operating Voltage	Operating Current (mA)	Size (L x W x T) Inches	Size (L x W x T) mm	Pricing 1	Pricing 5	Pricing 25
228161	P7.2-75	7.2	100	10.3 x 3.9 x .04	270 x 100 x 1.1	$34.95	$31.49	$28.25
228195	PT15-150	15.4	100	10.3 x 6.9 x .04	270 x 175 x 1.1	47.95	44.95	42.95
228208	PT15-300	15.4	200	10.3 x 12.8 x .04	270 x 325 x 1.1	99.95	89.95	79.95

Mini-Panel Solar Cells

200221

2113666

Ready to Use! No Soldering

Mini-panels are secured in a plastic body with a prismatic cover to help capture all available light. 6" red/black wires attached.

2113666: Solar Cell Grab Bag

- Contains fragile cells of various sizes w/ 0.5V output
- No leads attached and require soldering

Part No.	Mfr. P/N	VDC @ mA	Size (L x W)	1	5
2136913	SOL1	0.5 @ 400	2.8" x 1.8"	$6.49	$5.95
200221	SOL4	2.0 @ 200	3.0" x 3.7"	10.95	9.95
215319	4-3.0-100	3.0 @ 100	3.8" x 2.5"	12.95	11.95
2140373	750-00030	6.0 @ 167	4.9" x 2.5"	12.95	11.95
215327	4-6.0-50	6.0 @ 50	3.8" x 2.5"	14.95	13.49
2113666	SC-GRAB	Solar cell grab bag (min. 40pcs/bag, sizes vary)		9.95	8.95

Solar Panels

Solar Photovoltaic Arrays

- Full-size monocrystalline solar panels can be used to charge your batteries or power your project
- 2 different panels to suit your applications
- Max. power voltage: 17.8V
- Open-circuit voltage: 21.6V
- Panel frames are made from aluminum for lightweight quality
- Maximum system voltage: 1000VDC
- Tested under Standard Test Conditions (STC – irradiance 1000W/m², AM 1.5 spectrum, cell temperature: 25˚C)

2128569

2128585

Part No.	Mfr. Part No.	Max Power (W)	Max Current (A)	Short-Circuit Curr. (A)	No. of Cells	Dimensions (L" x W" x H")	Wt. (lbs.)	1	5	25
2128569	PM-25S	25	1.35	1.50	9	25.3 x 11.1 x 1.4	7.50	$119.95	$114.95	$109.95
2128585	PM-65S	65	3.65	4.04	36	32.8 x 21.2 x 1.4	18.96	249.95	239.95	229.95

★For additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

Parallax equips the electronics industry and hobby market with high-quality robotics, revolutionary microcontrollers, a wide variety of sensors and a complete line of learning kits for beginners and educators.

www.Jameco.com/ParallaxZone

Parallax ELEV-8 V2 Quadcopter Kit

NEW MARKED IN PINK

A flying robotic platform that is lifted and propelled by four fixed rotors. There are no fixed wings; all of the lift is created from the rotors. It uses fixed-pitch blades, whose rotor pitch does not vary as the blades rotate; control of vehicle motion is achieved by varying the relative speed of each rotor to change the thrust and torque produced by each.

- Experience level: expert

Part No.	Mfr. Part No.	Description	Price
2217254	80200	ELEV-8 V2 quadcopter	$549.95

★BASIC Stamp Modules — Enter Web Code BSM

PropScope Kit 2134871

BOE-BOT 387997

ActivityBot Robot 2191998

Propeller QuickStartk 2151494

3-Axis Accelerometer 2109667

Wide Angle Sensor 2205018

Kits, Protoboards and Development Boards – BASIC Stamp Series

★Web Code: MBS

Part No.	Mfr. Part No.	Description	Price
661116	27297	StampWorks Experiment kit, 35 projects based on the BASIC Stamp, includes Parallax Professional Development Board.	$289.95
2134871	32225	Understanding Signals w/ the PropScope, USB oscilloscope and test components. Learn to generate, view, and measure a variety of wave forms. BOE & BASIC Stamp 2 required.	229.95
387997	28832	USB BOE-BOT full kit, completely reprogrammable and uses a BASIC Stamp module, expandable for different robotic projects.	169.95
282933	28132	Serial BOE-BOT full kit, completely reprogrammable and uses a BASIC Stamp module, expandable for different robotic projects.	169.95
387971	27807	BS2 Educational Starter Kit, USB version, includes Board of Education, BASIC Stamp 2 module & guide to complete over 40 activities.	159.95
282829	27207	BS2 Educational Starter kit, serial version, includes Board of Education, BASIC Stamp 2 module & guide to complete over 40 activities.	159.95
2109165	28803	Board of Education full kit, USB version, includes carrier board, BASIC Stamp 2 module, designed for those already familiar with programming Stamp modules.	99.95
2109202	90005	BASIC Stamp activity kit, learn electronics and programming, includes guide and components for over 40 hands-on activities.	79.95

Kits, Protoboards and Development Boards – Propeller Series

★Web Code: MBS

Part No.	Mfr. Part No.	Description	Price
2191998	32500	ActivityBot Robot kit teaches programming the multicore Propeller in C with easy to follow tutorials. High speed servos w/ optical encoders, PING sensor. No soldering required.	$199.95
2007126	32111	Propeller Professional Development Board, 40-pin DIP socket for P8X32A-D40, LEDs, buttons and typical devices and circuitry are built in for rapid project development (USB).	159.95
2151494	40000	P8X32A Propeller QuickStart Board. Familiarize yourself with the power multi-core Propeller chip. 64KB EEPROM, 8 blue LEDs, 8 resistive-touch buttons, 32 I/O, USB powerd.	34.95

Sensors, Modules and Accessories

★Web Code: PXS

Part No.	Mfr. Part No.	Description	Price
2007185	28028	Sensor sampler kit includes accelerometer modules, humidity/temp, flexiforce, PING ultrasonic, proximity (PIR), ColorPal, piezo film vibra tab, and QTI sensors.	$174.95
2111935	32213	X-band motion detector. Detection from 8-30 ft. Operating frequency: 10.525 GHz, 4-pin SIP interface, 5VDC, 8mA, Dimensions: 1.8" x 1.75" x 0.75", temp range: +32° to +131°F.	39.95
2150230	29174	Altimeter sensor module with SPI & I²C bus interface, 24-bit barometric pressure and temperature output.	29.95
2150221	27911	3-axis gyroscope module w/ embedded temperature sensor. I²C/SPI, 2.7-6.5VDC, 6.7mA @3.3VDC, 7mA @ 5VDC, Dimensions: 0.85" x 0.8", Temperature: -40° to 185°F.	29.95
2150248	29133	3-axis compass module, HMC 5883L, ±8 gauss, I²C, 2.7-6.5VDC, 1°-2° heading accuracy. MCU-ready.	29.95
282870	28017	2-axis accelerometer, measures ±3g on each axis, simple pulse output of g-force for each axis, 6-pin DIP module, analog output for temperature.	29.95
2109667	28526	3-axis accelerometer, digital output, SPI or I²C, sensitive select ±2g/±4g/±8g, 2.5 to 5.5 VDC, 26µA, Dimensions: 0.5" x 0.6" x 0.46", Temperature: -40° to 185°F, Compact in size.	29.95
282861	28015	Ping Ultrasonic Range/Distance Finder, 0.5" – 10 ft., 5VDC, 3-pin header, communication: positive TTL pulse, narrow acceptance angle, temperature: 32° to 158°F, 35mA active.	29.95
2109413	570-28015	PING Mounting Bracket kit, to make 180° sweep of its environment, includes Parallax standard servo, use with 282861, aluminum brackets and complete mounting hardware.	29.95
2127081	28380	ColorPAL color/light sensor, detects a full range of colors and outputs data as RGB components, 5VDC, Serial 1-wire communication, dimensions: 1.72" x 0.9" x 0.65".	23.95
2109245	28031	USB to Serial (RS-232) Adapter, DB9 male socket, includes USB-A to mini-B cable, USB 1.1 and 2.0 compatible.	19.95
2109456	28030	USB to serial (RS-232) adapter, DB9 male & USB mini-B port, use cable 2081481, 5V, Full speed USB, full duplex serial from 300 baud to 3Mbaud, dimensions: 1.7" x 1.2" x 0.5".	16.95
2082935	32313	SD card adapter, SPI communication. Card detect switch. Uses SMT components. Soldering required, 3.3VDC, dimensions: 1.7" x 1.74" x 0.52", temperature: 32° to 158°F.	15.95
2150256	28995	Sharp IR distance sensor GP2Y0A21YK0F, 10-80cm, 5V operation, 3-pin JST male header, 30mA, Dimensions: 1.75" x 0.74" x 0.53", Operating temperature: 14° to 140°F.	15.95
2082927	555-28027	PIR Sensor kit, single bit high/low output, detection range up to 20 ft., 3 Pin SIP for breadboard, small size, easy interface to any microcontroller, 3 to 6 VDC, 1.41" x 1.0" x 0.8".	12.95
2205018	28032R	Wide angle PIR sensor, 180°, range up to 30 ft., 3-6VDC, 4-Pin SIP, small size, user selectable "night mode", 150uA, single bit high/low output, dimensions: 1.42" x 1.42" x 0.79".	12.95
2082855	27800	Modular 2-axis joystick, spring auto return to center, cup-type knob, dual 10k pot with common ground, easy breadboard connection, 0.01 W, 1.64" x 1.2" x 1.1", 32° to 158°F.	8.95
2082901	27920	HS1101 Humidity Sensor, instantaneous de-saturation, fast response time, high reliability, 5VDC to 10VDC, dimensions: 0.25" x 0.4"Dia., temperature: -40°F to 212°F.	9.95
2109691	350-00014	Infrared receiver, 38kHz carrier frequency found in Boe-Bot and SumoBot kits.	5.95
2109624	28109	Boe-Bot/SumoBot wheel & tire set, 1 wheel & 2 rubber band tires, 2.62"Dia. molded plastic wheel.	5.95
2151451	604-00085	TSL237 light to frequency converter, 3-pin SIP, 320 to 1050nm, 2.7-5.5VDC, compact 3 lead clear plastic package, 200-300KHz, 150 ppm/°C temperature coefficient, 2mA.	3.95
2109763	605-00004	Piezo film vibration sensor, use as flexible switch, freq. response device, easy to use with COUNT or PULSIN commands, dimensions: 0.98" x 0.52", temperature: 32° to 158°F.	2.95
2129772	GP1UM287RK	56.8kHz infrared detecting unit for remote control (Sharp), anti EMI noise type, compact, various band pass frequncies, absolute supply voltage: 0 to 6V.	1.49

Visit the Mall of Electronic Kits – www.Jameco.com/KitMall

PARALLAX | | | DFROBOT | WIZnet | electric imp

Jameco carries a large selection of interface devices to make your projects come to life and have the ability to be controlled from anywhere. Adding wireless functionality to your next project has never been so easy!

www.Jameco.com/WirelessZone

2189610

Electric Imp Breakout Board

electric imp

Electric Imp makes it simple to bring the Internet to your devices. With imp connectivity you can empower your devices with intelligence, customization and convenience. The possibilities are endless. You may want to even try hacking your own candy machine.

Part No.	Description	Price
2190231	Parts Bundle for Candy Machine Hack (candy machine not included)	$44.95
2189610	Electric Imp - Imp Card WiFi Module	29.95
2189636	Electric Imp - April Breakout Board for Imp Card WiFi Module	12.95

RFID, Wireless Interface Devices & Embedded Neworking Solutions

RFID Reader Kit 2007169

Xbee Zigbee Pro 2123581

Bluetooth Module 2144446

RF Transceiver Module 2109384

Ethernet Module 2124322

Web Server Module 2124373

RFID Read/Write Modules and Tags

★Web Code: RAD

Part No.	Mfr. Part No.	Description	Price
2109739	28141	RFID passive tag, 54mm x 85mm rectangle, EM-4100 family, 125 KHz activating frequency, thin package, readable from 2 to 5" of RFID reader, tag has a unique 10 digit ID	$3.49
2109851	28161	RFID passive tag, blue eye key fob, EM-4100 family, 125 KHz activating frequency, readable from 2 to 5" of RFID reader, keychain tag, tag has a unique 10 digit ID	2.95
2123514	28440	RFID read/write module, serial, use 2123522, supports passive tags, 125 KHz RFID transponder tags, upto 116 bytes of user data storage on a single tag, 5VDC, asynchronous	49.95
2007169	32390	RFID Reader kit, serial card reader, includes 4 different passive tags, 2400 baud serial interface, Bi-color LED for visual indication of status	49.95

Wireless Interface Devices

★Web Code: WID

Part No.	Mfr. Part No.	Description	Price
2109384	27982	433MHz RF Transceiver module, 1200-9600bps transfer rate, 250 ft. line of sight range, asynchronous serial data, SIP header, power down mode for longer battery life	$39.95
2160753	F301-SGP-D024-01	10-position single row female header with 2mm pin spacing, mates w/ Xbee chips	.99
2113412	32403	Xbee adapter board raw PCB with 40-pin single row header & 2mm sockets, includes mounting holes, 3.3V pass-thru to Xbee module, 1.16" x 1.0" x 0.58"	4.49
2123611	32401	Xbee adapter board, 3.3/5V, Vreg & Logic converter included,3.3-5 VDC, communication: serial pass-through to Xbee module, dimensions: 1.51" x 1.0" x 0.58"	16.95
2113421	32400	Xbee adapter board, USB interface, PCB mount, 0.1" spacing, includes mounting hole, voltage: 5V from USB/Vdd, 3.3V generated on-board, serial pass-thru to Xbee module	27.95
2129326	A000021	Xbee/Zigbee Shield for Arduino, communicate wirelessly using Zigbee, based on Xbee module	19.95
2113375	32404	Xbee PCB antenna, 1mW, 2.4GHz, 300' line of sight, 802.15.4 network, Parallax support, PCB antenna, low power sleep modes,100' indoor and 300' outdoor (series 1)	24.95
2113391	32406	Xbee chip antenna, 60mW, 2.4GHz, <1 mile range line of sight, 802.15.4, configured with API or AT commands, 8 digital I/O, (7) 10-bit ADC inputs, low power sleep mode	41.95
2123581	32409	Xbee, zigbee series 2, 1.25mW, wire antenna, <400 ft. line of sight range, configured with API or AT commands, local or over the air, 10 digital I/O, (4) 10-bit ADC inputs	29.95
2123590	32408	Xbee, zigbee series 2 pro, 63mW, wire antenna, <2 mile line of sight range, cross-compatibility with other Series 2 modules, 2.4 GHz frequency band,1200 bps interface data rate	42.95
2144438	TEL0023	Bluetooth Bee in Xbee footprint, 30m max range, CSR BC417143, v2.0+EDR, 2.4-2.48GHz, input voltage: 3.3 VDC@ 50mA, module size: 1.25" x 0.94" x 0.35"	26.95
2159331	TEL0002	USB Bluetooth v2.0 dongle, PC/MAC compatible, 33' range max. upto 3 Mbps, open space under the operational range of about 10m, intuitive software user interface	4.95
2144446	TEL0026	Bluetooth module, 3.5-8V. v2+EDR, 2.4-2.48GHz, 30m max range, sensitivity: less than 84 dBm, safety features: authentication and encryption, module size: 1.57" x 0.78" x 0.51"	32.95

Embedded Networking Solutions

★Web Code: WHZ

Part No.	Mfr. Part No.	Description	Price
2189636	APRIL	Electric Imp Breakout Board, SD card socket for use w/ WiFi card P/N 2189610, 3.3V input, on board mini-USB connector	$12.95
2189610	IMP001-US-R-ENG	Electric Imp - Imp Card, WiFi module, 6-pin, ~70kB RAM, 6 I/Os, (2) I²C channels, SD card form, 32-bit Cortex M3 processor, low power 6uA sleep mode	29.95
2132664	WIZ108SR	RS-422/485 to Ethernet module, connects with serial device directly, 10/100 Ethernet interface. W7100 TCP/IP hardware chip	23.95
2124322	WIZ110SR	Serial to ethernet module, 10/100Mbps Ethernet max 230Kbps serial. DB9 interface. W5100 TCP/IP hardware chip	32.95
2132779	WIZFI210	Ultra low-power Serial-to-WiFi module brings WiFi connectivity via serial host interface, IEEE 802.11b/g/n compatible, up to 11Mbps	34.95
2124373	WIZ200WEB	Embedded web server module having Atmega128 & W5300, operates as HTTP server, supports 10/100Mbps Ethernet	39.95

Intel Galileo

- 32-bit Quark SoC X1000 • Arduino 1.0 pinout
- Hardware/software compatible with Uno R3 shields
- (1)Mini-PCIe slot, 100Mb Ethernet, µSD slot, RS-232 Host, USB Host & Client port, 8MB NOR Flash
- Getting Starter book recommended (P/N 2208500)

Part No.	Mfr. Part No.	Price
2208454	E000037	$89.95

NEW MARKED IN PINK

PARALLAX XBee Wireless Pack

- Complete RF solution for wireless PC to MCU communication
- (2)Series 1 Xbee 802.15.4 PCB antenna modules, (1) XBee USB adapter, (1) XBee 3.3V/5V adapter for MCU and pin headers
- KickStart sample code online for BASIC Stamp 2, Propeller & Arduino microcontollers

Part No.	Mfr. Part No.	Price
2171225	32440	$89.95

★For additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

TinyCircuits is an open-source hardware company specializing in designing and manufacturing very small (Tiny) electronics. Their products offer a core set of building blocks for makers to build cool stuff! Over 40 modules to choose from!

NEW MARKED IN PINK

TinyDuino Basic Kit

This kit includes the TinyDuino Processor Board with Battery Holder, TinyShield USB & ISP Board, one TinyShield Proto 1 board, and a 3 board mounting kit (screws, nuts, and standoffs) and basic instructions on how to get going.

Part No.	Description	Price
2211207	Tiny Duino basic kit	$39.95

TinyShield MicroSD

This TinyShield microSD Adapter lets you add a huge amount of storage by connecting a microSD card to your TinyDuino. With SD card support libraries included with the Arduino Software environment.

Part No.	Description	Price
2211451	Tiny Shield MicroSD	$14.95

Arduino Microcontrollers, Kits, Shields & Accessories

Visit www.Jameco.com/ArduinoZone for all Arduino products

FLORA Arduino 2184261

Microcontroller 2170767

Arduino Yún 2193441

TFT LCD Display 2193459

PCB Shield 2173829

Arduino Robot 2193467

Microcontroller Boards

★Web Code: ARD

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W")	Pricing 1	Pricing 5
2151259	KitPro	BB-Arduino	Build an Arduino-compatible circuit, Atmega328P, assembly required, breadboard/PCB not included.	—	$13.95	$12.95
2115768	Solarbotics	KARDW	Ardweeny microcontroller kit, Arduino-compatible, Atmega328, 7+ pieces, assembly/soldering required.	1.6 x 0.54	9.95	9.49
2157765	DFRobot	DFR0159	DFRduino Pro Mini V1.2 (Arduino Pro Mini compatible) MCU board with 16MHz ATmega328, 14 digital I/O pins, 8 analog inputs, reset button, and holes for mounting pin headers.	1.3 x 0.7	19.95	18.95
2184261	Adafruit	659	FLORA Arduino-compatible wearable electronic platform. 3.5-16VDC, USB-mini.	1.75 Dia.	26.95	25.49
2151486	Arduino	A000066	Uno Rev. 3, Atmega328 (DIP), 14 digital I/O, 6 analog I/O, USB, ICSP, 32K flash.	2.7 x 2.1	27.95	24.95
2163778	Arduino	A000057	Leonardo with headers, 20 digital I/Os, 7 PWM channels, 16MHz crystal, 32k flash, 2.5k SRAM, microUSB.	2.7 x 2.1	24.95	23.49
2163840	Arduino	A000073	Uno SMD Rev. 3, same as Rev.2 but has ATmega16U2 USB-Serial converter & 1.0 pinout, USB-B.	2.7 x 2.1	29.95	27.95
2170222	Arduino	A000062	Due, with 32-bit ARM core MCU, 54 digital I/Os, 12 analog inputs, 4 UARTs, 84MHz clock, 512kB flash.	4.3 x 2.1	49.95	48.95
2121148	Arduino	A000005	Nano v3.1, ATmega328, 14 digital I/O (6 PWM), 8 analog input, 0.6" wide breadboard-ready,USB mini-B.	0.7 x 1.7	38.95	36.95
2157466	WickedDevice	NAN-USA	Nanode Kit v5, similar to Uno but has built-in Ethernet 10baseT ability. Requires FTDI device to program.	2.7 x 2.1	29.95	27.95
2157861	Dagu	RS019	Micro Magician v2 Robot Controller. Dual H-bridge, 3-axis accelerometer, IR. Arduino-compatible.	2.4 x 1.2	34.95	32.95
2173706	DFRobot	DFR0225	Romeo v2 All-in-One controller, integrated 2-way DC 2A motor driver and Xbee socket, based on ATmega32U4.	3.5 x 3.3	39.95	36.95
2171436	Arduino	A000095	Esplora board with Atmega32U4 AVR, built-in sensors, joystick, 2 Tinker kit connectors & socket for color TFT display.	6.5 x 2.4	59.95	57.95
2152366	Arduino	A000067	Mega2560 Rev. 3, 54 digital I/O (14 PWM), 16 analog input, 256K flash. ATmega16U2 USB-Serial converter.	4.3 x 2.1	46.95	44.95
2170767	Secret Labs	Netduino Plus 2	32-bit microcontroller w/ 22 GPIOs combined w/ SPI, I²C, 4 UARTs (1 RTS/CTS), 6 PWM channels & six 12-bit ADC channels.	2.8 x 2.1	59.95	56.95
2152294	DFRobot	DFR0162	XBoard v2 with WIZnet Ethernet port, XBee socket and ATmega328 MCU. 8 digital I/O, 8 analog input.	2.6 x 1.6	39.95	35.95
2163794	Arduino	A000060	Arduino Ethernet with USB2Serial converter. Uno MCU & Ethernet shield in one board. PoE ready.	2.7 x 2.1	69.95	64.95
2163815	Arduino	A000068	Arduino Ethernet Rev. 3 without PoE module, ATmega328, µSD slot & W5100 Ethernet chip, RJ45.	2.7 x 2.1	56.95	54.95
2163858	Arduino	A000074	Arduino Ethernet with PoE module, Rev. 3. ATmega328, µSD memory slot & W5100 Ethernet chip, RJ45.	2.7 x 2.1	79.95	74.95
2193441	Arduino	A000008	Yún. Built in Ethernet & WiFi, µSD slot, 20 digital I/O. Atheros AR9331 runs Linux.	2.7 x 2.1	74.95	72.95
2167736	DF Robot	DFR0188	Flymaple Quadcopter Controller w/ ARM Cortex-M3 MCU, 3-axis accelerometer/gyroscope/compass, barometric pressure sensor.	2.0 x 2.0	74.95	69.95
2121121	KitPro	KIT-GSA	Get Started with Arduino kit, includes book, Arduino Uno, breadboard, LEDs, switches. No solder required.	—	69.95	64.95
2171188	Arduino	K000007	Arduino Starter kit includes Uno Rev. 3 & 38 other components w/ book of 15 projects to learn and build.	—	99.95	94.95
2193467	Arduino	A001078	Dual board robot on wheels. With 2 pots, 5 buttons, compass, 5 IR floor sensors, USD card reader & TFT display.	7.5 x 4.0	249.95	—

Shields for Arduino (Arduino sold separately)

★Web Code: AOS

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W")	Pricing 1	Pricing 5
2152438	Arduino	A000082	Arduino Prototyping Shield PCB Rev. 3, compatible with new Arduino R3 pinout. PCB only.	2.7 x 2.1	$4.49	$4.25
2159277	DFRobot	DFR0019	Prototyping shield with mini breadboard. SOIC-14 pad, ICSP header, GND/5V rails (assembled).	2.7 x 2.1	12.95	11.49
2152446	Arduino	A000083	Arduino Proto Shield Rev. 3, 2 mini pushbuttons, 3 LEDs and a few resistors. Design your own shield!	2.7 x 2.1	12.95	11.49
2193459	Arduino	A000096	1.77" TFT LCD color display with µSD slot, 160x128px. AVR-based Arduino compatible. 5VDC.	2.3 x 1.7	26.95	25.95
2190581	Boardworx	SMT-600	SMD and thru-hole prototyping board, fits all standard nano-size Arduino boards, 0.5mm grid spacing.	2.5 x 2.1	12.95	11.95
2190573	Boardworx	SMT-500	SMD and thru-hole prototyping board, fits all standard size Arduino boards, 0.5mm grid spacing.	2.7 x 2.1	13.95	12.95
2190590	Boardworx	SMT-700	SMD and thru-hole prototyping board, fits all standard mega-size Arduino boards, 0.5mm grid spacing.	4.0 x 2.1	14.95	13.95
2152391	Arduino	A000077	Arduino Proto Shield Rev. 3 (assembled). Has reset button, ICSP connector and pass-through headers.	2.7 x 2.1	15.95	14.95
2152411	Arduino	A000080	MEGA Rev. 3 Protoshield printed circuit board, PCB only. For full protoshield kit, see P/N 2152420 below.	4.0 x 2.1	6.49	6.25
2152420	Arduino	A000081	MEGA Rev. 3 Protoshield kit, multilayer PCB design, with ICSP header slot & two SOIC prototyping areas.	4.0 x 2.1	14.95	13.49
2157458	Wicked Device	ASK1	Ardweeny Proto Shield for use with the Ardweeny (P/N: 2115768, not included.) Breadboard included.	3.1 x 2.1	16.95	14.95
2173829	Macetech	MTCEN001	Centipede add-on PCB shield, I²C interface, provides 64 GPIO pins, 5V, 2x10 headers, headers unsoldered.	2.7 x 2.1	24.95	22.49
2144534	DFRobot	DFR0060	Screw Shield for Arduino. Convert female header pins to more secure screw terminals.	2.7 x 1 (x2)	7.95	7.25

Visit the Mall of Electronic Kits – www.Jameco.com/KitMall

Arduino Microcontrollers, Kits, Shields & Accessories (Continued)

Data Logging Shield 2184202

Motor Shield 2128534

WiFi Shield 2163786

Education Shield 2153781

GPS Logger Shield 2184211

Color Sensor 2159373

Shields for Arduino (Arduino sold separately) Continued

★Web Code: AOS

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W")	Pricing 1	Pricing 5
2159314	DFRobot	DFR0131	Proto Screw Shield (assembled). Provides prototyping area & screw terminals for secure I/O connections.	2.65 x 3.17	$15.95	$14.49
2127582	Liquidware	DoubleWide	Replicate all Arduino pins into 2 locations so you can add 2 shields while having access to both at the same time. Shields sit side by side.	2.7 x 4.2	19.95	18.95
2159306	DFRobot	DFR0015	XBee Expansion Shield. Allows an Arduino board to communicate wirelessly with XBee 1mW, XBee Pro, or XBee 2.5 Series.	2.5 x 2.4	13.95	12.95
2163751	Arduino	A000007	XBee Expansion Shield w/ Maxstream series 2 XBee RF module. Up to 100-meter distance transmission.	2.5 x 2.4	59.95	56.95
2184202	Adafruit	1141	Data Logging Shield. Built in RTC & µSD slot, 3.3V regulator. Additional libraries required.	2.7 x 2.1	19.95	18.95
2140402	Arduino	A000064	Wireless Proto Shield with XBee communication support. Up to 100-ft indoors/300-ft outdoors.	2.7 x 2.1	24.95	22.49
2152358	Arduino	A000065	Wireless SD Shield with µSD card slot and XBee socket. Up to 100-ft indooes/300-ft outdoors.	2.7 x 2.1	29.95	27.95
2152260	DFRobot	DFR0144	Relay Shield controls up to 4 relays. Max. switching power: DC 90W or AC 360VA. Controllable with Arduino, Xbee or Bluetooth.	3.25 x 2.2	19.95	17.95
2187737	Velleman	KA05	I/O shield kit. 6 analog in, 6 digital in, 6 relay out, 120V/1A max load per output.	2.8 x 2.2	25.95	24.95
2167744	DFRobot	DFR0071	SD Card Breakout Shield for standard SD and microSD cards. Switch-selectable, allows mass storage.	1.5 x 1.2	13.95	12.49
2144411	DFRobot	DFR0009	LCD Shield. 16x2, HD44780 compatible. White text, blue backlight, uses LCD4Bit library.	2.7 x 2.1	17.95	16.95
2152286	DFRobot	DFR0092	Graphics LCD Shield provides a 48x48 pixel display. 6 digital, 5 analog I/Os, LCD4884 displays. English or Chinese, integrates a 5 DOF joystick.	2.3 x 2.1	26.95	24.95
2193651	Adafruit	1438	Motor/Stepper/Servo Shield v2.0. Supports 4 DC or 2 stepper motors. 4 H-bridges; 1.2A per bridge.	2.7 x 2.1	19.95	18.95
2152403	Arduino	A000079	Arduino MotorShield Rev. 3. Dual full-bridge for inductive loads like relays, solenoids, motors. 2A/Channel.	2.7 x 2.1	29.95	28.49
2157781	DFRobot	DFR0008	Input shield with 2-axis push button joystick, 4 colored push buttons, BT & Xbee headers.	4.8 x 2.1	16.95	15.95
2191218	DFRobot	DFR0265	I/O Expansion Shield v7. 3.3/5V operating select, XBee/Bluetooth-ready, SD slot, 3.3V out.	2.1 x 2.1	19.95	18.95
2159429	DFRobot	DFR0165	I/O Expansion Shield for Mega with 3 XBee slots, 1 microSD slot, prototyping area, and Arduino shield headers.	4.9 x 2.2	19.95	18.95
2128534	Robot Power	MEGAMOTO	High-power Motor Shield. 5-28V, 13A/30A peak, H-bridge or dual half-bridge.	2.7 x 2.1	49.95	47.95
2157829	DFRobot	DRI0009	2-Amp Motor Shield. Allows drive of two 7-12VDC motors with 2A maximum current each way.	2.3 x 2.2	18.95	16.95
2157802	DFRobot	DFR0105	Power Shield. Provides a voltage range from 1.25-12V with 3A peak current, supply voltage range: 4.5V-35V.	2.3 x 2.3	22.95	19.95
2135734	Rogue Robotics	AP-RMP	MP3 playback module without stacking headers. Module only. Supports MMC/SD/SDHC up to 32GB.	2.7 x 2.1	59.95	54.95
2136657	Rogue Robotics	AP-RMP-H	MP3 playback module with stacking headers. Arduino-compatible, supports MMC/SD/SDHC up to 32GB.	2.7 x 2.1	64.95	59.95
2152374	Arduino	A000072	Arduino Ethernet Shield Rev. 3 with µSD slot. PoE ready. Connects to LAN with Ethernet Library.	2.7 x 2.1	37.95	35.95
2152382	Arduino	A000075	Arduino Ethernet Shield Rev. 3 with µSD slot & Power over Ethernet module. Embedded W5100 chip.	2.7 x 2.1	59.95	56.95
2157811	DFRobot	TEL0047	WiFi Shield v2.1 for Arduino. IEEE802.11b/g/n compatible, data rates: 11, 5.5, 2, 1 Mbps. Uses 3.3V	2.3 x 2.1	95.95	89.95
2163786	Arduino	A000058	WiFi Shield. Connects Arduino to the internet wirelessly, 802.11b/g networks, WEP/WPA2 personal encryption.	2.7 x 2.1	89.95	86.95
2153781	Parallax	35000	Board of Education Shield. Solderless breadboard prototyping & servo ports. Works with Uno & Mega.	4.0 x 3.0	34.95	29.95
2184211	Adafruit	1272	Ultimate GPS Logger Shield with GPS module. -165dBm, 66-CH, RTC, µSD slot. Uno-compatible.	2.7 x 2.1	59.95	54.95
2167779	DFRobot	TEL0051	GPS/GPRS/GSM Module v2. 4-band, AT-commands, 6-9VDC@0.1A, embedded SMD antenna.	2.8 x 2.2	99.95	94.95
2157837	DFRobot	TEL0044	GPS Shield for Arduino, w/ KickStart technology. GALILEO receiver module, built-in flash memory, antenna included.	2.8 x 2.2	109.95	99.95
2153799	Parallax	130-35000	Robotics Shield kit mounts on BOE-BOT chassis (not included) features 40+ hands-on activities.	5.0 x 3.3	134.95	124.95
2127558	Liquidware	Touchshield Slide	320x240 pixel resistive OLED touch screen, ATmega2560, can store sixty 128x128 images.	2.7 x 2.1	169.95	164.95

Sensors, Accessories and Miscellaneous Kits

★Web Code: AOA

2137756	Arduino	A000040	Header kit for shields. (2) 1 x 6 pos & (2) 1 x 8 pos, 15mm pin length, 0.1" spacing.	—	$1.75	$1.59
2152180	DFRobot	DFR0062	Wii Chuck Adapter is Arduino-compatible. Inserts into connector of a Nintendo Wii nunchuck controller 4-pin header allows access to 2-axis joystick, 2 buttons, and 3-axis ±2g accelerometer.	1.0 x 0.25	3.95	3.49
2159453	DFRobot	DFR0028	Digital tilt switch sensor. 3-pin connection: output, power, ground. Mercury-based. 5VDC.	1.2 x 0.8	4.95	3.95
2159381	DFRobot	SEN0114	Soil moisture sensor. Reads moisture present, includes analog sensor cable. 3.3/5V @35mA.	2.4 x 0.8	5.95	4.95
2159445	DFRobot	DFR0034	Analog sound sensor. Detects sound intensity, input voltage: 5VDC. 3-pin connection.	1.2 x 0.8	7.95	6.95
2159568	DFRobot	SEN0128	Analog alcohol sensor. Sensitivity-adjustable, input voltage: 5VDC. MQ3. 3-pin connection.	1.7 x 0.8	8.95	7.95
2159373	DFRobot	SEN0101	Color sensor with RGB sensor chip and 4 white LEDs. Digital TTL interface, 2.7-5.5V, TCS3200.	1.2 x 1.2	8.95	7.95
2157845	DFRobot	DFR0077	RS-232 to TTL converter. 4-pin connection: 5V, GND, logic in (SRX), logic out (STX), 300 to 115200 bauds.	1.7 x 1.4	9.95	8.95
2144454	DFRobot	DFR0017	Relay module. Arduino compatible. 150VAC/24VDC max switching voltage, 10A(NO) 5A(NC).	1.4 x 0.9	9.95	8.95
2152315	DFRobot	DFR0107	Arduino-compatible IR remote and receiver kit. Includes 3-wire cable. Downloadable library & sample code.	3.4 x 1.6	9.95	8.95
2150441	Dagu	RS002A	Compound infrared sensor can be used as a range finder or movement tracker within 200mm, 4 pairs of IR phototransistors and 4 IR LEDs.	1.9 x 1.2	8.95	7.95
2159437	DFRobot	DFR0061	2-axis joystick module with built-in button switch. Arduino-compatible.	1.5 x 1 x 1.26	10.95	9.95

Continued on next page

Arduino is a tool for making computers that can sense and control more of the physical world than your desktop computer. It's an open-source physical computing platform based on a simple microcontroller board, and a development environment for writing software for the board.

www.Jameco.com/ArduinoZone

The Arduino Robot

NEW MARKED IN PINK

The Arduino Robot is the first official Arduino on wheels. The robot has two processors, one on each of its two boards. The Motor Board controls the motors, and the Control Board reads sensors and decides how to operate. Each of the boards is a full Arduino board programmable using the Arduino IDE. Both Motor and Control Boards are microcontroller boards on the ATmega32u4. The Arduino Robot is the result of the collective effort from a team that looked at how to make learning science fun.

Part No.	Description	Price
2193467	Arduino Robot with 4AA rechargeable batteries	$249.95

Arduino Microcontrollers, Kits, Shields & Accessories (Continued)

FLORA Smart Neo 2184288

Capacitive Touch Kit 2159390

Conductive Sewing Thread 2144489

Lithium-Ion Battery 2127566

TFT Touchscreen 2183859

Acrylic Chassis 2210001

Sensors, Accessories and Miscellaneous Kits (Continued)

★Web Code: AOA

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W" x H")	Pricing 1	Pricing 5
2144462	DFRobot	SEN0019	Adjustable infrared sensor switch. 3-80cm range, 5V@100mA. 18" cable with 3-pin connector.	1.76 L x 0.70 Dia.	$9.95	$8.95
2184288	Adafruit	1260	FLORA RGB Smart Neo Pixel v2 (4 pack). 24-bit, 5-9VDC, chainable. 18mA constant current per LED.	0.5 Dia.	11.95	10.95
2152251	DFRobot	DFR0106	Light disk with 7 SMD RGB LEDs. 5V operation, 4-pin header, 6000mcd.	1.42 Dia.	10.95	9.95
2134926	Arduino	A000009	Project enclosure, ABS plastic, fits: Uno-Duemilanove-Diecimila-NG or MEGA, ethernet shield and battery.	3.4 x 2.5 x 1.1	12.95	11.95
2134993	ValuePro	PROTO KIT	830-contact breadboard with 70-piece jumper wire kit for easy prototyping.	6.5 x 2.5	13.95	12.95
2152340	Arduino	A000059	USB to 5V serial adapter board. Includes pins for RX, TX, 5V, ground and reset.	1.7 x 1.0	15.95	13.95
2152243	DFRobot	DFR0065	FTDI basic breakout board for USB to serial communication. Uses DTR pin for hardware auto-reset when a new sketch is downloaded.	1.6 x 0.85	16.95	14.95
2159461	DFRobot	DFR0143	Triple axis accelerometer, with selectable sensitivity: ±1.5g/6g, 3 JST connectors, low pass filter, analog output.	1.0 x 0.9	16.95	14.95
2159496	DFRobot	DFR0126	Digital audio analyzer w/ graphic equalizer display filter giving your Arduino ears. Can be read in 7 different frequency bands.	1.2 x 0.8	17.95	16.95
2117341	Solarbotics	50512	Basic breakout board. 3.3/5V, FTDI mini USB-B to serial 6-pin, works with Arduino & clone 5V Arduino boards can use as a USB port, FT232RL chip.	1.4 x 0.65 x 0.25	19.95	18.95
2150521	Dagu	RS003HP	Wild Thumper high power switch for circuit protection. 6-20 bat. voltage, 2x15A H-bridge.	2.4 x 1.75	19.95	17.95
2159402	DFRobot	DFR0066	Humidity and temperature sensor with SHT1x sensor. Individually calibrated in a precision humidity chamber.	1.25 x 0.67	19.95	18.95
2159251	DFRobot	DFR0141	Light disc with 12 SMD RGB LEDs. Individual color/brightness configurable, 5V operation, 12C Assembly req.	2.5"Dia.	19.95	17.95
2159390	DFRobot	DFR0129	Capacitive touch kit, with iPod-style wheel touch, keypad touch, and a grid touch pad, includes cables.	—	24.95	22.95
2170581	Tux-Lab	E001-TUX	Aluminum enclosure for Arduino Uno and Duemilanove. Clear acrylic cover, two slots for USB and DC power jacks.	3.2 x 2.5 x 0.9	22.95	19.95
2144665	PowerSwitch Tail	80135	Power cord switch. Control outlet with microcontroller, 3-prong, 15A @ 125VAC, 5V control signal.	4.0 x 2.1 x 1.5	29.95	26.95
2144489	ValuePro	26015102353402	Conductive sewing thread. Size 92, 234/34 (4 ply), 50Ω/meter. Perfect for Lilypad or wearables.	400'+ reel	29.95	26.95
2144500	DFRobot	DFR0018	9-pc analog sensor set for Arduino. Includes big push button, LED light module, ambient light, capacitive touch, LM35 temperature, magnetic, vibration, tilt, and grayscale sensor. Each sensor has 12" wires.	(1) 1.4 L x 0.8 W (8) 1.2 L x 0.8 W	39.95	36.95
2127566	Liquidware	HICAP Li Backpack	High capacity 2200mAh (5V/3.3V) Lithium-Ion battery. Rechargeable via Arduino and USB type-B mini.	2.7 x 2.1 x 0.5	46.95	44.95
2157757	DFRobot	KIT0003	Auto-watering kit with control board, temp/humidity sensor, moisture sensor, water tube, immersible pump, mini USB cable, 6xAA battery holder, DC adapter and enclosure	3.7 x 2.4 x 2.4	59.95	54.95
2157749	DFRobot	DFR0182	Wireless gamepad v2.0. Supports Xbee, Bluetooth, RF and WiFi via the Xbee socket, allows the user to define the buttons and protocols via standard Arduino IDE, 3 AAA batteries required	5.5 x 4.6	64.95	59.95
2167761	DFRobot	KIT0011	24-piece advanced sensor set, including sensors such as light, gas, sound, touch, accelerometer, and more	—	84.95	79.95
2152307	DFRobot	COMB0002	Wireless programming kit for Arduino Uno/Duemilanove, Mega 1280/2560. Includes: 2 programming modules, I/O shield, Xbee USB adapter, USB cable	2.4 x 2.4	89.95	84.95
2183859	EarthLCD	ARLCD	3.5" Color TFT Touchscreen, Arduino-compatible, 16-bit GPU, 320x240px, 65k color, LED backlit	3 x 3 x 0.9	89.95	—

Chassis/Mobile Platforms and Accessories

★Web Code: MOB

Part No.	Manufacturer	Mfr. Part No.	Description	Dimension (L" x W" x H")	Pricing 1	Pricing 5
2210001	Dagu	DG007	Magician chassis is acrylic platform. 2 gear motors with 65mm wheels & rear caster. 6VDC via 4xAA holder	6.85 x 4.33	$17.95	$16.95
2150547	Dagu	DG008	4WD plastic mobile platform with (4) 4.5V motors. No load speed is 90 ±10 rpm	6.25 L x 5.0 W	26.95	23.95
2124277	DFRobot	ROB0005	2WD aluminum mobile platform with (2) 3-6VDC motors, speed: ~27.6"/sec.	6.7 Dia.	57.95	55.95
2124285	DFRobot	ROB0003	4WD aluminum mobile platform with (4) 3-6VDC motors, speed: ~35"/sec.	7.9 x 6.7 x 4.1	59.95	54.95
2144420	DFRobot	ROB0025	4WD aluminum mobile platform with wheel encoder, (4) 4.5-6V motors, speed: ~26.7"/sec.	9.0 x 7.3 x 4.3	79.95	74.95
2146345	DFRobot	ROB0022	4WD aluminum mobile platform with Romeo (v1.1) microcontroller. Romeo is Arduino-compatible and features built-in motor control, speed: ~35"/sec. (4) 3-6VDC motors included	7.9 x 6.7 x 4.1	84.95	79.95
2159488	DFRobot	SEN0038	2 Wheel encoders with motors for DFRobot 3PA & 4WD Rovers. +5V, < 20mA, 20PPR	—	13.95	12.95
2159912	DFRobot	FIT0003	Replacement wheels w/ tires. Used w/ above 2WD/4WD mobile platforms. Fits motor P/N 2150432, 2 wheels in the pack	2.58 Dia. x 1.03 W	12.95	11.95
2159921	DFRobot	RB-TIRE	Replacement tires only without rims to replace FIT0003 tires. 4 tires in the pack	2.58 Dia. x 1.07 W	2.49	2.25

Visit the Mall of Electronic Kits – www.Jameco.com/KitMall

ElectroSet Arduino I²C Serial Interface Shield and Modules

Serial modules allow you to daisy-chain many modules to the interface shield leaving your I/O pins free for other devices. Perfect for control systems, machine data, hobby projects and the Internet of Things. 3.3V operation.

Part No.	Description	Price
2216454	Arduino I²C Interface Board, 2x16 LCD header and prototyping area.	$34.95
2216542	On/off 8-push button board with red/green LED indicators.	59.95
2216471	Red 8-digit 7-segment display, CC, internal memory storage.	59.95
2216462	2x16 parallel LCD, black text, green backlight, fits P/N 2216454.	46.95
2216593	Accelerometer, 2-axis tilt sense, ±1.7/5/18g selectable.	15.95
2216500	12-bit D/A converter, LTC-2631-Z, 2.5V full-scale 10ppm/°C.	24.95
2216497	12-bit A/D converter, MCP221, 22.3K s/s in fast mode.	19.95
2216569	Dual EnerChip solid state battery, 2x50µAh capacity.	16.95
2216534	8-bit general purpose parallel I/O expansion for I²C serial bus.	19.95
2216489	AM18X5 RTC w/ CBC3150 solid state battery, 12/24 hour.	12.95
2216551	5-way navigation switch with 5 LED visual. 20mA @ 15VDC max.	13.95
2216577	Temperature sensor, MCP9800, 9-12 bit select, 400µA max.	10.95
2216526	I²C fan out to three 6-pin female headers. Allows more modules.	8.95

2216454

2216471

2216593

2216500

2216577

2216526

Visit www.Jameco.com/ArduinoZone for all Arduino products.

Stretch and Flex Sensors

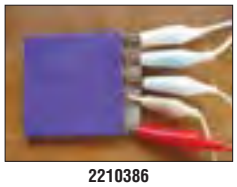
Push, pull or bend, flexible sensors give your project a unique feel for the environment around it. Some are kits and require assembly or customization for your application.

★Web Code: EVS

Part No.	Mfr. Part No.	Type	Resistance	Size (L" x W")	Price
2210335	FLX-01L	Bi-flex	1kΩ – 20kΩ	4.5 x 0.375	$9.95
2210351	FLX-01H	Bi-flex	50kΩ – 200kΩ	4.5 x 0.375	9.95
2210360	NFS-01	Neoprene Flex	200Ω – 2kΩ	4.7 x 0.6	17.95
2210386	NPM-01	Neoprene Pressure	25kΩ – 200kΩ	1.9 x 1.6	17.95
2210378	KSS-01	Knit Stretch	200Ω – 2kΩ	3.9 x 0.2	17.95

2210351

2210360


2210386

2210378

Arduino and Raspberry Pi Sensors and Accessories

Whether you're taking readings, sending data or viewing results, DFRobot has the hottest parts for your projects.

★Web Code: DFR

Part No.	Description	Price
2213270	MG-811CO2 sensor, 5V & on-board heating circuit, great for air quality control	$59.95
2213341	ACP220 radio communications module, UART/TTL, 1000m line of site	49.95
2213253	2.8" 320x240 USB TFT touch display module for Raspberry Pi, micro-USB input	45.95
2213245	Bluno: Arduino Uno with built-in Bluetooth LE 4.0, iOS/Andriod application ready	35.95
2190733	Analog slide position sensor, straight-slip potentiometer, 5VDC, 5.4Ω	9.95
2213413	Digital infrared motion sensor, 3-5V@50µA, 110˚ field of view (FOV), 23' max range	5.95
2213368	DHT11 digital temperature/humidity sensor, 0-50˚C, 20-90%RH, 3.3/5V	4.95
2213376	LM35 analog temperature sensor, 0-100˚C, 10mV/˚C sensitivity	4.49
2213384	Digital buzzer module, 3.3/5VDC, activate with simple HIGH/LOW signals	3.95

2213253

2213245

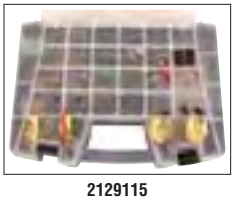
2190733

2213341

Project and Work Bench Starter Kits and Bundles

Learning a new subject or just stocking up, starter kits provide the parts to get you going.

Part No.	Description	Price
358598	6-piece solder tool kit: 30W iron, stand, sponge, long nose pliers, wire stripper and side cutter.	$15.95
2132322	11-piece soldering aid: Case holds 30W iron, stand, heat sink clamp, solder, pliers, cutters & drivers.	19.95
2113236	12-piece test lead kit with BNC, banana plugs, mini clips, multimeter leads and ESD strap.	39.95
2129115	Deluxe Electronics Pack 1: 200+ pieces of resistors & caps, hoop-up wire, breadboard, batteries, holders, 9 watt multi-output power supply, speaker, pots, alligator clips, LEDs, switches, relays and case.	84.95
2129123	Deluxe Electronics Pack 2: 100+ piece active kit of 74 series ICs, regulators, switches, headers, heat shrink, sockets, test clips, protoboards, pots, solder, 12-key keypad, helping hand magnifier and case.	94.95
2196713	littleBits Synth Kit: Build a modular synthesizer by KORG. 10 modules plus speaker.	159.95
2213261	Beginner Arduino Kit: DFRduino Uno R3, proto shield, buzzer, resistors, LEDs, IR remote and sensors.	49.95
2171188	Arduino Starter: Uno R3, USB cable, project book with 15 activities and 35 different components.	99.95
387971	BASIC Stamp Discovery: Learn to use BS2-IC module and experiment with 40+ projects (USB version).	159.95


2129115

2213261

358598

2196713

★For additional products, availability and specifications visit Jameco.com and enter the Web Code in the product search box

JAMECO® ELECTRONICS
1355 Shoreway Rd., Belmont, CA 94002-4100

Toll-Free Ordering and Customer Support:
Domestic: 1-800-831-4242 / International: 1-650-592-8097
Domestic Fax: 1-800-237-6948 / International Fax: 1-650-592-2503
Website: http://www.Jameco.com / Email: Info@Jameco.com

PRESORTED STANDARD
U.S. POSTAGE PAID
JAMECO ELECTRONICS

Customer Number

OFFER CODE

Like our catalog, we have even more products on our website

Scan on your smartphone with a code reader app.

If you would like to unsubscribe from Jameco's catalog please visit www.Jameco.com/CatalogUnsubscribe

Printed in USA

FREE SHIPPING – SEE PAGE 1 FOR DETAILS

Geiger Counter Kits

Detect alpha, beta or gamma radioactive particles with an audible click and LED blink. Digital Pulse Output port provides a TTL logic pulse so you can connect to your accessories such as dataloggers, digital meters or RS-232 adapters. Measures 0-100 mR/hr.*

IMAGES SCIENTIFIC INSTRUMENTS

★Web Code: TMK

2210141

2210159

Part No.	Mfr. Part No.	Tube	Particle	Tube Size	Price
2210141	GCK-01-01	GMT-01	alpha/beta/gamma	1.6"L x 0.59"OD	$169.95
2210167	GCK-01-06	GMT-06	beta/gamma	1.3"L x 0.236"OD	129.95
2210159	GCK-01-02	GMT-02	beta/gamma	4.0"L x 0.375"OD	129.95

*9V battery and assembly required. Enclosures sold separately.

3D Printer Kit

The popular DIY 3D Printer Kit that you assemble can print objects up to 7.8" length, width or height with 3mm ABS or PLA filament.

★Web Code: TDP

- 0.5" extrusion nozzle
- 120-300mm/s print speed
- Includes 5m of black PLA
- Weight: 19.84 lbs.

Part No.	Mfr. Part No.	Size (W" x D" x H")	Price
2184561	K8200	19.7 x 16.5 x 24.4	$749.95

3D Printing Pen

- Uses 1.75mm PLA/ABS
- Adjustable print speed and temp

Includes: Filament samples, 12V/3A power supply

Part No.	Mfr. Part No.	Size (W" x D" x H")	Price
2217019	3DPENU	7.3 x 1.7 x 1.2	$149.95

Open Source Clock Kit

- Display time in 12 or 24 hour format and date
- Program with USB/FTDI adapter (not included)
- Header for optional DS3231S temperature-compensated RTC (DS1307 RTC included)
- Two buttons to interrupts for mode selection • Modes include stop-watch and count-down timer
- I/O accessible for expansion/upgrades

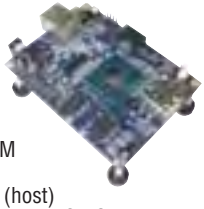
Part No.	Size (L" x W" x D")	Price
2217078	6.0 x 3.4 x 2.2	$79.95

BeagleBone Black Rev. C

- AM335x 1GHz ARM® Cortex-A8
- 512MB DDR3 RAM
- 4GB eMMC Flash
- USB host/client
- RJ45, micro-HDMI

Part No.	Size (L" x W")	Price
2207970	3.4 x 2.1	$54.95

MinnowBoard MAX



- Dual core
- 64-bit Intel® Atom™ E3825 1.33GHz
- 1x PCIe Gen 2 lane, 1 x SATA2
- 2GB DDR3 RAM
- 8MB SPI Flash
- USB 3.0 & 2.0 (host)
- RJ45, micro-HDMI, 8 GPIO

Part No.	Size (L" x W")	Price
2217271	2.9 x 3.9	$139.95

Flexible Speaker & Amp

- 3-5V operating, 2W amp output
- Good for wearable applications

2208315: 700Hz - 25kHz, 72dB max.
2208323: 650Hz - 18kHz, 82dB max.

Part No.	Size (L" x W" x D")	Price
2208315	2.7 x 5.4 x 0.08	$27.95
2208323	5.1 x 7.1 x 0.08	39.95

Hover-Hand Gesture and Touch Sensor Development Kit

- Detect hand gestures from up to 5" away (up, down, right or left)
- 5 electrodes for touch input buttons
- Works with Arduino & Raspberry Pi
- Breadboard friendly, I²C, 3.3V

Part No.	Size (L" x W")	Price
2216631	2.5 x 2.5	$39.95

Contact Information

Order Desk
Phone: 1-800-831-4242
Fax: 1-800-237-6948
E-mail: Sales@Jameco.com

Technical Support
Phone: 1-800-831-4242
E-mail: Tech@Jameco.com

Customer Service
Phone: 1-800-536-4316
E-mail: CustService@Jameco.com

Credit Department
Phone: 650-592-8097
Fax: 650-802-1583
E-mail: Credit@Jameco.com

International Order Desk
Phone: 650-592-8097
Fax: 650-592-2503
E-mail: International@Jameco.com

Feedback
E-mail: Feedback@Jameco.com

The Jameco RobotStore
Website: www.RobotStore.com

Club Jameco
Website: www.ClubJameco.com